

Course Code: BED4CC006

Core Course

B.Ed. Degree Programme
Semester- IV
CURRICULUM AND LEARNING DOMAINS
 (4 Credits-120 Hours)

✍ COURSE LEARNING OUTCOMES:

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

1. Identify the need and principles of curriculum
2. Differentiate curriculum and syllabus
3. Integrate the different types of curriculum
4. Appraise the contributions of thinkers on knowledge and education
5. Accept the role of teacher in knowledge assimilation and dissemination
6. Generalise the significance of domains of learning in curriculum designing
7. Categorise the determinants of curriculum construction
8. Detect the incorporation of critical concerns in curriculum construction
9. Deduce the steps involved in curriculum development
10. Investigate the need for curriculum evaluation.

Unit- I: CURRICULUM AND ITS MEANING

Learning Outcomes	Content	Suggested Strategies and Approaches	Assessment
1. Identifies the need and principles of curriculum 2. Differentiates curriculum and syllabus 3. Integrates the different types of curriculum 4. Outlines the curriculum visualized at different levels.	1.1 Curriculum : meaning nature and principles 1.2 Types of curriculum: 1.2.1 subjectcentred, 1.2.2 student centred, 1.2.3 society centred 1.2.4 lifecentred. 1.3 Need for curriculum in schools 1.4 Curriculum and Syllabus 1.5 Core curriculum Vs elective curriculum 1.6 Hidden' curriculum Vs planned curriculum 1.7 Curriculum visualized at	<ul style="list-style-type: none"> • Peer Learning • Digital Presentation • Seminar • Group Discussion 	<ul style="list-style-type: none"> • Class Test (Written / Oral) • Quiz

	different levels- national, state, school, class.		
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Unit- II: CONTRIBUTIONS OF THINKERS ON KNOWLEDGE

Learning Outcomes	Content	Suggested Strategies and Approaches	Assessment
1. Lists the thinkers who have contributed to knowledge and education 2. Appraises the contributions of thinkers on knowledge and education	2.1 Thoughts of thinkers on knowledge and education 2.1.1 John Dewey 2.1.2 Mahatma Gandhi 2.1.3 Paulo Friere 2.1.4 Rabindranath Tagore 2.1.5. Plato 2.1.6. Martin Buber	<ul style="list-style-type: none"> • Lecture - Briefing • Seminar • Assignment • Digital presentation 	<ul style="list-style-type: none"> • QA Session • Seminar Presentation

Unit- III: KNOWLEDGE AND DOMAINS OF LEARNING

Learning Outcomes	Content	Suggested Strategies and Approaches	Assessment
1. Recalls the meaning and nature of knowledge. 2. Differentiates between knowledge and knowing, information and knowledge 3. Accepts the	3.1 Knowledge – meaning and nature 3.2 Differentiate between knowledge and knowing, information and knowledge, belief and truth 3.3 Role of culture 3.4 Sources of knowledge 3.5. Knowledge transmits	<ul style="list-style-type: none"> • Lecture • Briefing • Seminar • Assignment 	<ul style="list-style-type: none"> • QA Session • Seminar Presentation

role of teacher in knowledge assimilation and dissemination 4. Generalises the significance of domains of learning in curriculum designing	sion and construction 3.6. Role of teachers in Knowledge assimilation and dissemination 3.7. Forms of Knowledge and its organization in schools. 3.8. Significance of domains of learning in curriculum designing.		
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Unit- IV: CURRICULUM: DETERMINANTS AND CONCERNS

Learning Outcomes	Content	Suggested Strategies and Approaches	Assessment
1. Categorises the determinants of curriculum construction 2. Enumerates the issues that influence curriculum construction 3. Detects the incorporation of critical concerns in curriculum construction	4.1. Determinants of curriculum construction 4.1.1 Social 4.1.2 Political 4.1.3 Geographical 4.1.4 Economic 4.1.5 Technological 4.1.6 Cultural 4.2 Critical concerns in curriculum construction: 4.2.1 Environmental concerns 4.2.2 Gender issues concerns 4.2.3 Inclusiveness 4.2.4 Value concerns and issues	<ul style="list-style-type: none"> • Peer Learning • Digital Presentation • Lecture • Assignment 	<ul style="list-style-type: none"> • Class Test (Written/ Oral) • Quiz

Unit- V: CURRICULUM DEVELOPMENT

Learning Outcomes	Content	Suggested strategies and Approaches	Assessment
<ol style="list-style-type: none"> 1. Describes the process of curriculum development 2. Deduces the steps involved in curriculum development 3. Proposes the support system for curriculum transaction 4. Predicts the role of teachers in curriculum development 5. Investigates the need for curriculum evaluation. 	<p>5.1 Process of curriculum development</p> <ol style="list-style-type: none"> 5.1.1 Formulating aims and objectives, 5.1.2 Criteria for selecting knowledge, 5.1.3 Organizing and incorporating knowledge, attitude and skills. 5.1.4 Inter relationship of subjects. 5.1.5 Selection and Organisation of learning environments. <p>5.2 .Curriculum transaction</p> <ol style="list-style-type: none"> 5.2.1 Support system for curriculum transaction (men and material) 5.2.2 Roles and responsibilities of teachers in curriculum development. <p>5.3. Curriculum evaluation Need for evaluation - Feedback from learners, teachers, community, and administrators .</p>	<ul style="list-style-type: none"> • Lecture - Briefing • Seminar • Peer Learning • Assignment 	<ul style="list-style-type: none"> • QA Session • Seminar Presentation

SUGGESTED ACTIVITIES (any two)

1. Analyse a secondary school textbook for the incorporation of environmental concerns in curriculum.
2. Critical appraisal of the thought of a contemporary Indian thinker on knowledge and education and presentation of report.
3. Prepare a society-centered curriculum for the emerging Indian society.
4. Conduct a discussion on curriculum evaluation and prepare a report.

PRESCRIBED READINGS

1. Acharya.P. (1996). *Indigenous Education and Brahminical Hegemony*.
2. Chisholma, Rodrick.M. (1987). *Theory of Knowledge*. New Delhi: Prentice hall of India Pvt.
3. Mirnalini.T (2007). *Curriculum Development*. Hyderabad: Neelkamal publications pvt. Ltd.
4. Mohan.N., & Kamala, Kannan.R. (2016). *Knowledge and Curriculum*. Dharasuram: Thiruvalluvar publications.
5. Sykes.M. (1987). *The Story of Nai Talim*. Wardha: Nai Talim Samiti.
6. Tagore.R. (2003). *Civilization and Progress*. In *Crisis in Civilization and Other Essays*. New Delhi: Rupa & co.
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SUGGESTED READINGS

1. *The Transmission of Knowledge in South Asia: Essays on Education, Religion, History and Politics*. New Delhi: Oxford University Press, 98-118.
2. Badheka.G. (2001). *Bala Shiksha aur Shikshak* Bikaner: Vaagdevi Prakashan.
3. Dewey.J. (1952). *The School and the Child*. New York: The Macmillan Company. (Also available in Hindi School and Bachche Translation: RRCEE).
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5. Rabindranath Tagore.M.K. Gandhi, Maria Montessori Fifty Major Thinkers on Education from Confucius to Dewey. USA: Routledge.

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9. Rousseau, Jacques J.(1979). *Emile or on Education*, translated by Allan Bloom Basic.7-18.
10. Sykes, M. (1988). *The Story of NaiTaleem*, NaiTaleemSamiti,Sevagram: Vardha. Chapter 3: *The Seed Germinates*, Chapter 4: BasicNational Education, (Also available in Hindi Naitaleem Ki KahaniTranslation:RRCEE)
11. Thakur, R. (2004). *RavindranathkaShikshadarshan*Chapter 1: Tote kiShiksha, Chapter AashramShiksha, New Delhi: Granthshipli. Weir (Eds.), *Curriculum, syllabus design and equity: A primer andmodel*Routledge.
12. Shulman.L.S. (1986). *Those who Understand: Knowledge Growth in Teaching*.Educational Researcher, 4–14.
13. Sternberg, R.J. (2013). *Intelligence, Competence, and Expertise*. In A. J. Elliot & C.S.
14. Dweck (Eds.), *Handbook of Competence and Motivation* (pp. 15–30).GuilfordPublications.
15. Stiggins.R. (2005). *From Formative Assessment to Assessment for Learning: A pathtosuccess in standards-based schools*. Phi Delta Kappan,324–328.
16. The PROBE Team. (1999). *Public Report on Basic Education in India*. Delhi:Oxford.
17. NCERT (2014). *Basics in Education-Textbook for B. Ed. Course*. New Delhi:NCERT.

Course code: BED4CC007

Core Course

B.Ed. Degree Programme**Semester- IV****GENDER JUSTICE AND INCLUSIVE EDUCATION**

(4 Credits – 120 Hours)

COURSE LEARNING OUTCOMES:*On successful completion of the course, the student teachers will be able to:*

1. Recognize gender related concepts
2. Examine the role of family, caste, class, religion, culture and media in the construction of gender role, gender identity and gender socialization
3. Describe the gender discriminations in School
4. Appraise the importance of gender parity in education
5. Explain the nature of differently abled children.
6. Determine the assessment strategies for the differently abled.
7. Plan intervention programmes for the differently abled.
8. Analyse the need of collaborating with various professionals and agencies for support and resources to facilitate inclusion
9. Develop the strategies for dealing with diversity in the classroom.

**Unit- I: GENDER: CONCEPT, ROLES IDENTITY, SOCIALIZATION
ISSUES IN THE SOCIETY**

Learning Outcomes	Content	Suggested Strategies and Approaches	Assessment
1. Distinguishes between sex and gender 2. Explains gender related concepts 3. Examines the role of family, caste, class, religion, culture and media in the construction of gender role, gender identity and gender socialization 4. Describes the gender issues 5. Supports Combating female body	1.1 Concept of gender: difference between gender and Sex 1.1.1. problems of transgender. 1.2 Gender related concepts: patriarchy, matriarchy, masculinity, equity, equality and	<ul style="list-style-type: none"> • Lecture • Discussion • Class Seminar • Assessment • Panel Discussion 	<ul style="list-style-type: none"> • Seminar Presentation • Report • Test (oral / written)

<p>objectification</p>	<p>sexuality.</p> <p>1.3 Gender role: gender roles in family, caste, class, religion, culture and media</p> <p>1.4 Gender identity and socialization practices: role of family, school, peer group, community and media</p> <p>1.5 Gender Issues: Gender bias, gender stereotyping, and gender inequalities. 1.5.1.Reasons for gender inequalities</p> <p>1.6 Gender-based violence (GBV) Violence against women in Indian society. 1.6.1 Offences against women and girls.</p> <p>1.7 Meaning and concept of body objectification - Combating female body objectification:</p> <p>1.8 Gender stereotypes in mass media objectification of female body- 1.8.1. propagation of popular beliefs through media.</p>		
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Unit- II: GENDER DISCRIMINATION AND PARITY IN EDUCATION

Learning Outcomes	Content	Suggested Strategies and Approaches	Assessment
1. Examines gender discriminations in School 2. Determines the plans for gender fair school environment 3. Analyses the role of school, parents, peers, teachers, curriculum and textbooks in reinforcing gender equality 4. Appraises the gender parity programmes and schemes of Government of India	2.1 Gender discriminations in school: school facilities, class room interactions, rituals and school/ routines, curriculum, textbooks, discipline, parents and teachers attitude 2.2 Influence of education on gender equality. Gender fair school environment, access to basic amenities and other instructional resources to girls-measures to gender equality. 2.3 Role of school, parents, peers, teachers, curriculum and textbooks in reinforcing gender equality. 2.4 Gender Parity in education: ways to achieve; women access to and participation in education: Mahila Samakhya, National Program for Education of Girls at Elementary Level (NPEGEL), Kasturba Gandhi Balika Vidyalaya (KGBV) National Scheme of Incentives to Girls for Secondary Education. UDAAN, Beti Bachao Beti Padhao scheme.	<ul style="list-style-type: none"> • Lecture • Group Discussion and Presentation • Document analysis • Panel Discussion • Debates • Seminar • Discussion • Assignment • Group discussion • Small group session 	<ul style="list-style-type: none"> • Document Analysis • Test (oral / written) • Report • Seminar Presentations

Unit- III: DIVERSITY AND INCLUSION

Learning Outcomes	Content	Suggested Strategies and Approaches	Assessment
<ol style="list-style-type: none"> 1. Distinguishes psychological, socio-cultural, economic, emotional diversity and behavioural difficulties. 2. Outlines the historical perspectives of inclusive education. 3. Distinguishes inclusive, integrated and segregated education 4. Justifies the need of inclusive schools 5. Examines the strengths and limitations of inclusive schools 	<ol style="list-style-type: none"> 1.1 Diversity: gender culture and language marginalized-economic disparities- children with social, emotional and behavioural difficulties. 1.2 Historical perspective of inclusive education- from exclusion to inclusion. 1.3 Concept, meaning and definition of inclusion 1.4 Difference among Inclusive, integrated and segregated education. 1.5 Need and importance of inclusive school in view of Right to Education in India 1.6 Inclusive schools- strengths and limitations 	<ul style="list-style-type: none"> • Lecture-discussion • Power point presentations • Invited lectures • Brainstorming • Netsurfing • Field visit 	<ul style="list-style-type: none"> • Observation • QA session • Class test • Analysis of digital document • Report • Assignment

**Unit-IV: ASSESSMENT AND INTERVENTION STRATEGIES FOR THE
DIFFERENTLY ABLED**

Learning Outcomes	Content	Suggested Strategies and Approaches	Assessment
1. Describes the concept of sensory impairment, neuro-developmental disabilities, loco motor, multiple disabilities and intellectual impairment. 2. Explains the nature of differently abled children. 3. Identifies the assessment strategies for the differently abled. 4. Plans intervention programmes for the differently abled.	4.1 Nature, assessment and intervention strategies for the differently abled 4.1.1 Children with sensory impairment 4.1.2 Visual hearing and speech disabilities 4.1.3 Visual impairment, 4.1.4 Hearing and Speech impairment 4.2 Children with neuro-developmental disabilities, Intellectual disability (Cerebral Palsy), Learning disability and Autism Spectrum Disorder: 4.3 Children with Loco Motor, and Multiple Disabilities 4.4 Children with intellectual impairment	<ul style="list-style-type: none"> • Lecture • Debates • Seminar • Small group discussion 	<ul style="list-style-type: none"> • Observation • Assignment • Report • Test • Posts • Quiz • Seminar presentation • Class test

Unit- V: ADDRESSING LEARNERS' DIVERSITY IN SCHOOLS

Learning Outcomes	Content	Suggested strategies and Approaches	Assessment
1. Appraises the inclusive learning environment 2. Explains Curriculum adaptation. 3. Analyses the need of collaborating with various professionals and agencies for support and resources to facilitate inclusion 4. Examines the strategies for dealing with diversity in the classroom.	5.1 Inclusive learning Environment - characteristics. 5.2 Curriculum adaptation: Concept, need and principles 5.3 Concept of resource teacher parents and communities in schools. 5.3.1 Resource Mobilization, 5.3.2 Collaborating with other Professionals, Collaborating with other Institutions 5.3.3 Parents and Community as Resources 5.4 Strategies for dealing with diversity in the classroom: 5.5 Individualized Educational Plan (IEP), 5.5.1 Universal Design for Learning (UDL) 5.5.2 Differentiated Instruction (DI) 5.5.3 Collaborative teaching, 5.6 Assistive and adaptive devices for differently abled children 5.7 Alternative means of assessment and evaluation in inclusive classrooms.	<ul style="list-style-type: none"> • Lecture • Group Discussion and Presentation • Panel Discussion • Debates • Seminar • Small group 	<ul style="list-style-type: none"> • Report • Assignments • presentation • Observation • Class test

SUGGESTED ACTIVITIES (Any two)

1. Prepare a case study of a differently abled learner.
2. Prepare the need profile of all children in a class. Analyze the profile thus prepared for establishing relation between students' needs and their abilities/disabilities
3. Prepare a report on violation of girl's rights by collecting data from various media resources.
4. Prepare a report on analysis of textual materials from the perspective of gender bias

▣ PRESCRIBED READINGS

1. Alice, Rajkumar. M., Rita Sundari.D.,&Digumarti, Bhaskara,Rao, (2004).*Special Education*. New Delhi: Discovery Publishing House.
2. Bender.W.N. Learning Disability, Allyn.,& Bacon, Simon & Schuster, 1995, Boston London.
3. Bharat, Singh.(2008). *Modern Teaching of Exceptional Children*. New Delhi: Anmol Publications.
4. Bhasin, Kamla. (2000). *Understanding Gender*. New Delhi: Kali for Women.
5. Bhasin, Kamla. (2004). *Exploring Masculinity*. New Delhi. Women Unlimited.
6. Byerly.C.M.(2011).*GlobalReportontheStatusofWomenintheNewsMedia*. WashingtonDC: International Women's Media Foundation.
7. Carole Brugeiles.,& Sylvie Cromer. (2009). *Promoting Gender Equality Through Text Books*. Paris: UNESCO Publications Division.
8. Chakraborty,Asok, Bhattacharjee,Amitetal.(2013).*PrinciplesofManagementinEmploymentof Persons with Mental Retardation*. New Delhi: KanishkaPublishers.
9. Chintamani,Kar.(2008). *Exceptional Children their Psychology and Education*. NewDelhi: Sterling Publishers.
10. Dash.M.(2007).*Education of Exceptional Children*. New Delhi:Atlantic Publishers & Distributors.
11. Dharma Raja. B. William., &Kumar, Praveen S. (2011).*SpecialEducation: FocusonMathematics Learning Disability*. New Delhi: APH Publishing Corporation.
12. Kosut, Mary. (2012). *Encyclopedia of Gender in Media*. New Delhi: Sage Publications.
13. MHRD.(2000). *Bringing Girls Centre stage: Strategies and Interventions for*

- Girls Education in DPEP*. New Delhi: MHRD.
14. Mohanty., & Manoranjan. (2004). (Eds.), *Class, Caste, Gender*. New Delhi: Sage.
 15. NCERT (2005). *National Curriculum Framework*. New Delhi: NCERT.
 16. NCERT (2006). *Gender Issues in Education, Position Paper*. New Delhi: NCERT.
 17. NCERT. (2006). *Gender Issues in Education*. New Delhi: Publications Division.
 18. Rege, Sharmila. (2003). *Sociology of Gender*. New Delhi: Sage.
 19. Report of the C.A.B.E. (2005). *Committee on Girl's Education and the Common School System*. New Delhi: MHRD.
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 21. Thompson, Audrey. (2003). *Caring in Context: Four Feminist Theories on Gender and Education, Curriculum Inquiry*, Vol. 33, No. 1 (spring, 2003), pp.9-65.
 22. Vijayan, Premavathy., & Victoria. G. (Eds.). *Education of Visually Impaired Children with Additional Disabilities*. New Delhi: Kanishka Publishers.

📖 SUGGESTED READINGS

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2. Dunn. L. & Bay. D. M. (ed.). *Exceptional Children in the Schools*, New York: Holt, Rinehart, Winston.
3. Fredrick, Luic Aldama. (2005). *Brown on brown: Chicapola Representations of Gender, Sexuality, and Ethnicity*. University of Texas Press.
4. Hallahar. D. P., & Kauffman. J. M. (n.d.). *Exceptional Children: Introduction to Special Education*, Allyn., & Bacon, Massachusetts, 1991.
5. Hewett, Frank. M., & Foreness Steven. R., *Education of Exceptional Learners*, Allyn & Bacon, Massachusetts, 1984.
6. Hurlock, Elizabeth. B. (1974) *Personality Development*. New Delhi: McGraw Hil Education.
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8. Jordan, Thomas E. (n.d.). *The Exceptional Child*, Ohio: Merrill.
 9. Kata Rousmaiere, Kari Dehli., & Ning De Conink Smith. (2013). *Discipline, Moral Regulations and Schooling: A social history*. New York: Routledge.
 10. Kirk, S.A., & Gallagher, J.J., *Education of Exceptional Children*; Houghton Mifflin Co., Boston, 1989.
 11. Magnifico, L.X: *Education of the Exceptional Child*, New York: Longman.
 12. National Policy on Education (1986, 1992), MHRD, GOI, Delhi
 13. Shanker, Udey: *Exceptional Children*, Jullundur: Sterling Publications.
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 15. Smith, C.R, *Learning Disabilities – THE INTERACTION of LEARNER, Task and Setting*. Allyn & Bacon, Massachusetts, 1991.
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Course Code: BED4PC012

Pedagogic Course

B.Ed. Degree Programme
Semester-IV
EMERGING TRENDS IN BIOLOGICAL SCIENCE EDUCATION
(4 Credits -120 Hours)

 COURSE LEARNING OUTCOMES:

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

1. Choose the appropriate models of teaching Biological Science
2. Develop lesson plan based on different models of teaching in Biological Science
3. Discuss the emerging innovative strategies in teaching Biological Science
4. Choose the appropriate emerging strategies for teaching Biological Science
5. Examine the ways to link technology, pedagogy and content in classroom teaching
6. Employ different technological strategies in teaching Mathematics
7. Recognize the importance of co-curricular activities in teaching Biological Science
8. Discover the possibilities in organizing various co-curricular activities in Biological Science
9. Describe the importance of professional development of Biology teacher
10. Evaluate the qualities and professional skills of Biology teacher.

Unit- I: MODELS OF TEACHING

Learning Outcomes	Content	Suggested Strategies and Approaches	Assessment
1. Identifies various teaching models for teaching Biological Science 2. Classifies different families of models of teaching 3. Chooses the appropriate model for teaching Biological Science 4. Prepares lesson transcripts based on models of teaching	1.1 Models of teaching elements and functions. 1.2 Concept Attainment model 1.3 Advance organizer model 1.4 Inquiry training model	<ul style="list-style-type: none"> • Lecture • Discussion • Digital presentation • Interactive learning • Lesson plan preparation 	<ul style="list-style-type: none"> • Tests (written/oral) • Observation • Lesson transcript/plan

UNIT-II: EMERGING STRATEGIES FOR TEACHING BIOLOGICAL SCIENCE

Learning outcomes	Content	Suggested Strategies and Approaches	Assessment
1. Recognizes emerging strategies in teaching Biological Science 2. Discusses the importance of emerging strategies in teaching Biological Science 3. Determines the	2.1 Co-operative learning 2.2 Collaborative learning 2.3 Concept mapping 2.4 Brain based learning 2.5 Experiential learning 2.6 Blended learning 2.7 E-learning	<ul style="list-style-type: none"> • Briefing/lecture • Group discussion • Peer learning • Brain Storming • Seminar • Participatory Learning 	<ul style="list-style-type: none"> • Test (written/oral) • Observation • Seminar presentation

<p>appropriate strategies in teaching Biological Science</p> <p>4. Outlines the innovative strategies to transact the content</p>			
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Unit- III: TECHNO PEDAGOGIC CONTENT KNOWLEDGE

Learning Outcomes	Content	Suggested Strategies and Approaches	Assessment
<p>1. Identifies ways and means to link technology, pedagogy and content knowledge</p> <p>2. Correlates technology, pedagogy and content in classroom teaching</p> <p>3. Explains the importance of technology in teaching and learning Biological Science</p> <p>4. Employs different technologies in teaching Biological Science</p>	<p>3.1 Techno pedagogic content knowledge</p> <p>3.2 Web based learning</p> <p>3.3 Blog creation</p> <p>3.4 Science teacher as a techno pedagogue</p> <p>3.5 Techno-pedagogical Skills</p> <p>3.6 Free software in science</p> <p>3.7 Learning management system</p>	<ul style="list-style-type: none"> • Briefing/lecture • Discussion • Interactive Learning • Digital presentation • Hands on Experience 	<ul style="list-style-type: none"> • Test (written/oral) • Observation • Blog creation

Unit-IV: CO-CURRICULAR ACTIVITIES IN BIOLOGICAL SCIENCE

Learning Outcomes	Content	Suggested Strategies and Approaches	Assessment
1. Identifies the importance of co-curricular activities in Biological Science	4.1 Co-curricular activities- need and importance 4.2 Science club- organization and activities	<ul style="list-style-type: none"> • Lecture • Organizing science exhibition • Seminar • Organization of seminars/ workshops related to the subject 	<ul style="list-style-type: none"> • Test (oral/written) • Participation in co-curricular activities • Report writing
2. Develops a plan to organize various of co-curricular activities in Biological Science	4.3 Science Exhibition and Science Fair 4.4 Field Trips 4.5 Science garden 4.6 Nature calendar 4.7 Science Museum	<ul style="list-style-type: none"> • Visit to Science Exhibitions, Science Gardens and Museums 	<ul style="list-style-type: none"> • Seminar presentation
3. Locates the need of various of co-curricular activities in Biological Science			
4. Traces out the effect of different of co-curricular activities in Biological Science			

Unit-V: PROFESSIONAL DEVELOPMENT OF BIOLOGY TEACHERS

Learning Outcomes	Content	Suggested Strategies and Approaches	Assessment
1. Identifies the qualities of a Biology teacher 2. Discusses the academic and professional qualities of Biology teacher 3. Examines the importance of professional development of Biology teacher 4. Recognizes the professional development skills Biology teacher	5.1. Qualities of a Biology teacher 5.1.1 Academic and professional qualification 5.1.2. Professional Competencies– soft skills, Technological skill 5.2. Professional development of Biology teachers 5.2.1 In-service training 5.2.2. Summer institutes	<ul style="list-style-type: none"> • Lecture • Discussion • Interactive learning • Seminar • Assignment • Auto instruction 	<ul style="list-style-type: none"> • Tests (written/oral) • Seminar presentation • Assignment evaluation • Report writing

SUGGESTED ACTIVITIES (any two)

1. Prepare a concept map on any one topic in Biological Science.
2. Visit a scientifically important place and prepare the report.
3. Carry out a project in Biology and prepare a project report.
4. Prepare a lesson plan based on models of teaching.

PRESCRIBED READING

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2. Dash, B.N. (2005). *Psychology of Teaching Learning Process*, New Delhi: Dominant Publishers and Distributors.
3. Gupta S.K. (1985). *Teaching of Physical Science in Secondary Schools*, New Delhi: Sterling Publishing Pvt. Ltd.
4. Ignacimuthu, S. (2012). *Biotechnology an Introduction*, New Delhi: Narosa publishing house.
5. Joyce. B. & Weil (2000) .*Models of teaching (6th Edn)* .Boston:

Allyn and Bacon.

6. Krishnamacharyalu.V. (2011). *Science Education*, Hyderabad: Neelkamal Publications Pvt Ltd.
7. Mangal S.K. (1913). *Advanced Educational Psychology*, New Delhi: PHI learning Pvt Ltd.
8. Radha Mohan (2010). *Innovative Science Teaching for Physical Science Teachers*, New Delhi: PHI Learning Pvt. Ltd.
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10. Sharma R.C (2006). *Modern Science Teaching*, New Delhi, Dhanpat Rai Publications.
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SUGGESTED READING

1. Agarwal.S.K (2005). *Advanced Environmental Biotechnology*. New Delhi: A.P.H .Publishing Corporation.
2. Brown.T.A. (1999). *Principles of Genetic Engineering*. New York: Wiley.
3. Christopher Howe (2007). *Gene Cloning and Manipulation. Second Edition*, Cambridge University press.
4. Clark, R.C. & R.E. Mayer (2002). *E-learning and the Science of Instruction*, San Francisco: Pfeiffer.
5. Foster, L E. (2003). *Medical Nanotechnology: Science, Innovation and Opportunity*. Pearson Education, Upper Saddle River.
6. Gosh.T.K. (2005). *Biotechnology in Environmental Management. Vol 1 & 2*, New Delhi: A.P.H Publishing Corporation.
7. Heiss E.D. Obourn. S., & Hoffman C.W. (1985). *Modern Science Teaching*, New Delhi.
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Course Code: BED4PC013

Pedagogic Course

B.Ed. Degree Programme**Semester- IV****EMERGING TRENDS IN ENGLISH EDUCATION**

(4 Credits – 120 Hours)

COURSE LEARNING OUTCOMES:

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

1. Choose the appropriate techniques for teaching English
2. Analyse the different text types
3. Discuss the emerging innovative strategies in literature
4. Choose the appropriate strategies for teaching English language
5. Examines the ways to link technology, pedagogy and content in classroom technology
6. Employ different technological strategies in teaching English language
7. Categorise the recent trends in teaching English language
8. Examine the effect of various media in English language teaching
9. Describe the importance of professional development of English teacher
10. Evaluate the qualities and professional skills

Unit- I: DEVELOPMENTS IN ENGLISH

Learning Outcomes	Content	Suggested Strategies and Approaches	Assessment
1. Analyzes the emerging developments in English language teaching 2. Explores various types of texts	1.1. ICT-enabled techniques for teaching and learning English: Film adaptations of literary texts, Online Vocabulary games, Online Grammar games, Audio podcasts, Pronunciation, Conversation practice, 1.2 Exploring text types Online–Descriptive, Narrative, Expository, Argumentative- Neuro-linguistic Programming	<ul style="list-style-type: none"> • Visual Presentation • e-learning • Small Group Discussion • Seminar 	<ul style="list-style-type: none"> • write- up submitted after analyzing emerging e-learning techniques • Role performance analysis • seminar presentation

Unit- II: PERSPECTIVES OF INNOVATIONS IN LITERATURE

Learning Outcomes	Content	Suggested Strategies and Approaches	Assessment
1. Recognizes various innovative strategies of English language teaching 2. Discusses the objectives, needs and relevance of literature in school 3. Analyses the importance of translation	2.1 Literature in school curriculum- objectives, needs and relevance 2.2 Objectives of teaching literature in school curriculum 2.3 Literature and its indispensable role 2.4 Translation – Importance and need 1.4.1 Translation as a creative activity. 1.4.2 Personal Translation style, copy writing skill and using language as a creative tool.	<ul style="list-style-type: none"> • Lecture • Group Discussion • Presentation of Samples 	<ul style="list-style-type: none"> • QA Session • Role performance analysis

Unit- III: TECHNO–PEDAGOGIC CONTENT KNOWLEDGE

Learning Outcomes	Content	Suggested Strategies and Approaches	Assessment
1. Identifies the ways and means to link technology, pedagogy and content 2. Correlates technology, pedagogy and content in classroom teaching 3. Explains the scope of techno pedagogy in English language teaching 4. Employs different technologies in teaching English language.	3.1 Techno –pedagogy :meaning and importance 3.2 Inter-relationship between Content Knowledge, Pedagogic Knowledge and Technological Knowledge 3.3 Scope of techno-pedagogue in English language teaching 3.4 Technology in English language learning: virtual learning, mobile learning, Blended learning, online learning, blog creation, preparation of digital lesson plans	<ul style="list-style-type: none"> • Group Discussion • Demonstrations in Smart Classroom • Assignment 	<ul style="list-style-type: none"> • Assignment Analysis • Test (oral/Written) • Role performance analysis

Unit- IV: MEDIA IN ENGLISH LANGUAGE TEACHING

Learning Outcomes	Content	Suggested Strategies and Approaches	Assessment
1. Identifies the different media in English language teaching 2. Uses various media for language teaching 3. Employs the appropriate media for language teaching 4. Analyzes the types of social media in English language teaching	4.1 Role and relevance of media in English language teaching-learning: newspaper, radio, television, films, internet, magazines. 4.2 Social media- types 4.2.1 Social network – facebook, twitter, linkedin, media sharing – networks, instagram, snapchat, youtube – discussion forums - quora 4.3 Book marking and content curation networks- pinterest, flipboard- internet based networks- good reads.	<ul style="list-style-type: none"> • Group Discussion • Demonstration • Smart Classroom • Assignment 	<ul style="list-style-type: none"> • Assignment Analysis • Test (oral/Written) • Role performance analysis

Unit – V: PROFESSIONAL DEVELOPMENT OF ENGLISH TEACHERS

Learning Outcomes	Content	Suggested Strategies and Approaches	Assessment
1. Recognizes the importance of professional development 2. Discusses the academic and professional qualities of English 3. Examines the importance of pre service and in service programme.	5.1 Teaching as a profession 5.2 Pre-service and in-service programme 5.3 Qualities of an English Teacher 5.3.1 Professional competencies 5.3.2 Soft skills Technological skills.	<ul style="list-style-type: none"> • Assignments • Group work • Peer teaching • Seminar 	<ul style="list-style-type: none"> • Q.A. sessions • Discussion • Vocabulary check

SUGESTED ACTIVITIES (any two)

1. Prepare a digitalized lesson plan and submit online.
2. Collect and submit online resources of teaching /learning English.
3. Create a blog on English language learning.
4. Prepare a critical analysis of a fiction/poem.

📖 PRESCRIBED READING

1. The Internet Guide for English Language Teachers Dave Sperling, 1997, Prentice-Hall Regents. (1998 edition also available). Dave Sperling's Internet Activity Workbook Prentice Hall, Regents ISBN 0-13-010325-X, 1999. 308.
2. Tim, Boswood. (1997). New Ways of Using Computers in Language Teaching, TESOL.
3. Joy Egbert., & Elizabeth Hanson-Smith. (1999). CALL Environments: Research, Practice and Critical Issues Internet for English Teaching.
4. Adams. M.J. (1990). Thinking and Learning about Print. Cambridge, Ma: MIT Press.
5. Alexander. L.G. (1975). A First Book in Comprehension, Précis and

- Composition. Longman: Hongkong.
6. Brewster Jean, Gail Ellis., & Denis Giraf. (1992). *The Primary English Teachers's Guide*. Penguin Books: London.
 7. Choudhary. N.R. (2002). *English Language Teaching*, Himalaya Publish House, Mumbai.
 8. Cameron, Lynne. (2001). *Teaching Language to my Young Learners*. Cambridge University Press: Cambridge.

SUGGESTED READING

1. Content-based Second Language Instruction Brinton. D.M., Snow. M.A., & Wesche. M.B. (1989). New York: Newbury.
2. Information & Communication Technologies in ELT AbdulMahmoud Idrees Ibrahim, *Journal of Language Teaching and Research*, Vol. 1, No. 3, pp.211-214, May, 2010 Academy Publisher ISSN 1798-4769.
3. Dave, Pratima. S. (2002). *Communicative Approach to the Teaching of Bachelor of Education English as a Second Language*, Himalaya Publishing House, Mumbai.
4. Kohli. A.L. (2001). *Techniques of teaching English in the new millennium*. Dhanpat Rai: New Delhi.
5. Singh .Y.K (2005). *Teaching of English*. New Delhi: APH Publishing Corporation.
6. Amritavati. R. (1999). *Language as a Dynamic Text: Essays on Language, Cognition and Communication*. CIEFL Akshara series. Hyderabad: Allied Publishers.
7. Bond. L. Getat (1980). *Reading Difficulties – Their Diagnosis and Correction*, New York: Appleton – Century Crafts.
8. Byrne. D. (1975): *Teaching Writing*, London, Longman.

Course Code: BED4PC014

Pedagogic Course

B. Ed. Degree Programme

Semester- IV

EMERGING TRENDS IN HISTORY EDUCATION

(4 Credits – 120 Hours)

 **COURSE LEARNING OUTCOMES:**

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

1. Examine the way to link technology, pedagogy and content in classroom teaching
2. Employ different technological strategies in teaching history
3. Discuss the emerging innovative strategies in teaching history
4. Choose appropriate strategies for teaching history
5. Identify suitable models of teaching for history
6. Develop lesson plan based on models of teaching
7. Recognise the importance of co-curricular activities in history
8. Discuss the possibilities in organising co-curricular activities
9. Describe the importance of professional development of history teachers
10. Evaluate the qualities and professional skills of history teacher

Unit- I: TECHNO PEDAGOGIC CONTENT KNOWLEDGE ANALYSIS

Learning Outcomes	Content	Suggested Strategies and Approaches	Assessment
1. Identifies the ways and means to link technology, pedagogy and content. 2. Correlates technology, pedagogy and content in classroom teaching 3. Explains the scope and purpose of techno-pedagogy in history 4. Employs different technology in teaching history	1.1 Pedagogic content knowledge- ways to link techno pedagogy content knowledge 1.1.1 Need and significance 1.2 Interrelationship between techno-pedagogy and content. 1.3 Scope and purpose of techno pedagogy in history. 1.4 Teacher as a techno - pedagogue in history:	<ul style="list-style-type: none"> • Lecture • Discussion • Visual presentation • BrainStorming 	<ul style="list-style-type: none"> • Test (Oral/ Written) • QA Session • Report writing

Unit- II: EMERGING STRATEGIES IN TEACHING AND LEARNING HISTORY

Learning Outcomes	Content	Suggested Strategies and Approaches	Assessment
1. Recognizes various innovative strategies of teaching history 2. Discusses the need and importance of innovative strategies in teaching history 3. Determines the appropriate innovative strategies for teaching history 4. Adopts suitable innovative strategies for teaching	2.1 Innovative strategies: Need and Importance 2.1.1 Peer Tutoring 2.1.2 Collaborative learning 2.1.3 Co-operative learning 2.1.4 Problem-based learning 2.1.5 Flipped learning 2.1.6 Blended-learning 2.1.7 Brain-compatible learning: i) Mindmapping ii) Concept mapping 2.1.8 Video-conferencing 2.1.9 Experiential learning	<ul style="list-style-type: none"> • Lecture • Discussion • Seminar • Visual presentation 	<ul style="list-style-type: none"> • Test (Oral/ Written) • Quiz • QA Session • Seminar presentation

Unit- III: MODELS OF TEACHING HISTORY

Learning Outcomes	Content	Suggested Strategies and Approaches	Assessment
1. Defines models of teaching 2. Classifies different families of teaching models. 3. Chooses suitable models of teaching history 4. Prepares lesson	3.1 Models of Teaching - meaning and concept, 3.2 Descriptions of the model 3.3 Different families: Information processing, Social behavior and modern i) Concept attainment model ii) Advanced	<ul style="list-style-type: none"> • Lecture • Discussion • Workshop on Model Lesson plan writing 	<ul style="list-style-type: none"> • Test (Oral/ Written) • QA Session • Report writing • Evaluating lesson plan

plan based on models of teaching	organize model iii) Jurisprudential model iv) Inquiry training model		
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Unit- IV: CO-CURRICULAR ACTIVITIES IN HISTORY

Learning Outcomes	Content	Suggested Strategies and Approaches	Assessment
1. Recognises the need and importance of co-curricular activities 2. Identifies different co-curricular activities 3. Organizes different co-curricular activities.	4.1 Need and importance of co-curricular activities in teaching History - Advantages 4.1.1. Criteria for co-curricular activities 4.2 History Museum 4.3 Exhibitions 4.4 Excursions and field trips 4.5 Field Visits 4.6 Club Activities	<ul style="list-style-type: none"> • Lecture • Discussion • Auto learning • Visual presentation • Visits and Field trips 	<ul style="list-style-type: none"> • Tests (Oral/ Written) • Participation in co-curricular activities • QA Session

Unit- V: PROFESSIONAL DEVELOPMENT OF A HISTORY TEACHER

Learning Outcomes	Content	Suggested Strategies and Approaches	Assessment
1. Recognizes the need and importance of professional development 2. Explains the meaning of professional development 3. Compares pre-service and in-service programme 4. Selects suitable programme for professional development.	5.1 Professional development- meaning and significance 5.1.1 Need for continuous development 5.2 Teaching as a profession: pre-service and in-service programme 5.3 History teacher as a reflective practitioner: concept and strategies. 5.4 Various programmes for professional development 5.5 Qualities of a History teacher – 5.5.1 Professional Competencies- Soft Skills, Technological Skills.	<ul style="list-style-type: none"> • Lecture • Discussion • Seminar • Autolearning • Brainstorming 	<ul style="list-style-type: none"> • Test (Oral/ Written) • QA Session • Evaluation of report

SUGGESTED ACTIVITIES (any two):

1. Critically analyse the role of technology in teaching and learning History.
2. Design mind maps by selecting a unit for teaching Standard IX.
3. Preparation of lesson transcripts based on any two models of teaching.
4. Prepare a report on various programmes for professional development of history teachers.

PRESCRIBED READING

1. Aggarwal, J.C. (2003). *Teaching of social studies: A Practical approach*. New Delhi: Prentice Hall India pvt. Ltd.
2. Alexey, Semenov, UNESCO. (2005). *Information and Communication*

- Technology in Schools: A Hand book for teachers.*
3. Bhatt.B.D.,&Aggarwal.J.C. (1909). *Educational Document in India: Survey of Indian Education.* New Delhi: Arya book.
 4. Dash.B.N. (1998). *Content cum Methods of Teaching Social Studies.* Ludhiana: Ralyani Publishers.
 5. Josh.P. S.V, Gholkar.S.V. (1983). *History of Modern India.* New Delhi: Chand VCompany.
 6. Joyce.B.V, Well.M. (2003). *Models of Teaching (5thed).* New Delhi: Prentice Hall.
 7. Madhukumar, Indira. (2005). *Internet Based Distance Education.* New Delhi: Global Network.
 8. Passi,B.K.(1991). *Models of Teaching.* New Delhi: NCTE
 9. Singh, Gopal. (2004). *Teaching strategies.* New Delhi: APH Publishing Corporation.

SUGGESTED READING

1. Aggarwal.J.C. (2003). *Teaching of social studies: A Practical approach.* New Delhi: Prentice Hall India pvt.Ltd.
2. Alexey, Semenov, UNESCO. (2005). *Information and Communication Technology in Schools: A Handbook for teachers.*
3. Bhatt. B.D.,&Aggarwal.J.C. (1909). *Educational Document in India: Survey of Indian education.* New Delhi: Arya book.
4. Dash.B.N. (1998). *Content Cum Methods of Teaching Social Studies.* Ludhiana: Ralyani Publishers.
5. Josh.P. S. V, Gholkar.S.V. (1983). *History of Modern India.* New Delhi: Chand VCompany.
6. Joyce.B.V, well.M. (2003). *Models of Teaching (5thed).* New Delhi: Prentice Hall.
7. Madhukumar, Indira. (2005). *Internet Based Distance Education.* New Delhi: Global Network.
8. Singh, Gopal. (2004). *Teaching Strategies.* New Delhi: APH Publishing Corporation.

Course Code: BED4PC015

Pedagogic Course

B.Ed. Degree Programme
Semester-IV
EMERGING TRENDS IN MATHEMATICS EDUCATION

(4 Credits – 120 Hours)

 **COURSE LEARNING OUTCOMES:**

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

1. Examine the ways to link technology, pedagogy and content in classroom teaching
2. Employ different technologies in teaching Mathematics
3. Discuss the emerging innovative strategies in teaching Mathematics
4. Choose the appropriate strategies for teaching Mathematics
5. Choose the appropriate model for teaching Mathematics
6. Develop lesson transcripts based on different models of teaching in Mathematics.
7. Categorise the recent trends in teaching Mathematics
8. Examine the effect of various media in Mathematics teaching
9. Describe the importance of professional development of Mathematics teacher
10. Evaluate the qualities and professional skills of Mathematics teacher

Unit- I: TECHNO-PEDAGOGIC CONTENT KNOWLEDGE

Learning Outcomes	Content	Suggested Strategies and Approaches	Assessment
1. Identifies the ways and means to link technology, pedagogy and content 2. Correlates technology, pedagogy and content in classroom teaching 3. Explains the importance of technology in teaching and learning Mathematics 4. Employs different technologies in teaching Mathematics.	1.1 Concept of Techno pedagogic content knowledge 1.2 Technology in teaching and learning mathematics 1.3 Web-based Instruction 1.4 Online learning 1.5 Virtual learning 1.6 ICT based teaching and learning 1.7 Blog creation 1.8 Digital lesson in mathematics	<ul style="list-style-type: none"> • Lecture • Illustrations • Digital presentations • Seminar • Discussions • Assignment 	<ul style="list-style-type: none"> • Participant observation • Online evaluation • Evaluation of assignment

Unit- II: INNOVATIVE STRATEGIES IN TEACHING AND LEARNING MATHEMATICS

Learning Outcomes	Content	Suggested Strategies and Approaches	Assessment
1. Recognizes various innovative strategies in teaching Mathematics 2. Discusses the importance of	2.1 E-learning 2.2 Constructivist learning 2.3 Problem-based learning 2.4 Brain-based learning 2.5 Cooperative learning	<ul style="list-style-type: none"> • Lecture • Digital presentation • Seminar • Discussion 	<ul style="list-style-type: none"> • Tests (oral/written) • Participant observation • Evaluation of assignment

innovative strategies in teaching Mathematics 3. Determines the appropriate innovative strategy in teaching Mathematics 4. Outlines the different innovative strategies in teaching Mathematics	2.6 Collaborative learning 2.7 Concept mapping 2.8 Flipped learning 2.9 Blended learning 2.10 Videoconferencing	<ul style="list-style-type: none"> assignment 	
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Unit- III: MODELS OF TEACHING MATHEMATICS

Learning Outcomes	Content	Suggested Strategies and Approaches	Assessment
1. Defines models of teaching 2. Classifies different families of models of teaching 3. Chooses the appropriate model for teaching Mathematics 4. Prepares lesson transcripts based on models of teaching	3.1 Meaning and definition of teaching model 3.2 Assumptions regarding teaching models 3.3 Role of Teaching models 3.4 Families of teaching models 3.5 Elements of Teaching models 3.6 Some typical model: i) Concept Attainment Model, ii) Advance Organizer Model, iii) Inquiry Training Model	<ul style="list-style-type: none"> Discussions Electronic visual presentation Seminar 	<ul style="list-style-type: none"> Test (oral/ written) Questioning Paper presentation

Unit- IV: RECENT TRENDS IN MATHEMATICS EDUCATION

Learning Outcomes	Content	Suggested Strategies and Approaches	Assessment
1. Analyses the recent trends in Mathematics Education 2. Identifies the various digital resources for teaching Mathematics 3. Develops modules for teaching Mathematics 4. Uses various apps for teaching Mathematics	4.1 Computer assisted instruction 4.2 Computer managed instruction 4.4 Digital resources in Mathematics Education – CD, DVD, Websites Digital text books 4.4 Smart class room 4.5 Learning Management System 4.6 M-learning 4.7 Multimedia presentation 4.8 Modules in teaching and learning Mathematics 4.9. Apps for teaching and learning Mathematics	<ul style="list-style-type: none"> • Lecture • Discussion • Brainstorming • Collection of reviews related to classroom teaching 	<ul style="list-style-type: none"> • Test (Oral/ Written) • QA Session • Report writing

Unit- V: PROFESSIONAL DEVELOPMENT OF MATHEMATICS TEACHER

Learning Outcomes	Content	Suggested Strategies and Approaches	Assessment
1. Recognizes the importance of professional development	5.1 Professional Development: meaning and importance	<ul style="list-style-type: none"> • Lecture • Seminar • Discussions 	<ul style="list-style-type: none"> • Tests • Questioning • Student Reports
2. Discusses the special qualities of Mathematics teacher	5.2 Teaching as a profession		
3. Examines the importance of professional development of Mathematics teacher	5.3 In-service education of teachers		
4. Identifies the professional skills of Mathematics teacher	5.4 Special qualities of a Mathematics teacher		
	5.5 Professional skills of Mathematics teachers		
	5.6 Role of reflective practices in professional development.		

SUGGESTED ACTIVITIES (any two)

1. Prepare a concept map for any lesson in Mathematics.
2. Develop a CAI package in Mathematics.
3. Create a blog for anyone lesson in Mathematics.
4. Prepare a lesson transcript based on any one model of teaching.

PRESCRIBED READING

1. Bishoni, U.(2008). *Teaching of Mathematics*. Meerut: Lal Book Depot
2. Bruce, Joyce. & Weil, Marsha. (2004). *Models of Teaching*. U.K: Prentice Hall of India.
3. James, Anice. (2005). *Teaching of Mathematics*. New Delhi: Neelkamal Publications.
4. James, Anice. (2006). *Techniques of Teaching of Mathematics*. New Delhi: Neelkamal Publications.

5. Kulshreshtha, A.K. (2008). *Teaching of Mathematics*. Meerut: R.LallBooksDepot.
6. Mangal, S.K. (2000). *Teaching of Mathematics*. Ludhiana: R.P.FadonPrakashBrothers.
7. Passi, B.K. (1991). *Models of Teaching*. New Delhi: NCTE
8. Sharma, R.D. (2008). *Technological Foundation of Education*. Meerut: R.LallBooksDepot.
9. Soman, K., & Sivarajan, K. (2014). *Teaching of Mathematics*. Meerut: Lal Bok Depot.
10. Wadhwa, S. (2008). *Modern Methods of Teaching Mathematics*. New Delhi: KaranPapers.

📖 SUGGESTED READING

1. Aggarwal, S.M. (2001). *A Course in Teaching of Modern Mathematics*. New Delhi: Dhanpat Rai Publishing House.
2. Bhasin, Sonia. (2005). *Teaching of Mathematics - A practical approach*. Mumbai: Himalaya Publishing House.
3. Costello, J. (1991). *Teaching and Learning of Mathematics*. London: Routledge Publications.
4. Ediger, M., & Rao, D.B. (2000). *Teaching Mathematics Successfully*. New Delhi: Discovery Publishing House.
5. Siddiqui, H.S., & Khan, M.S. (2004). *Models of Teaching – Theory and Research*. New Delhi: Ashish Publishing House.
6. Siddiqui, M.H. (2007). *Teaching of Mathematics*. New Delhi: APH Publishing House.

Course Code: BED4PC016

Pedagogic Course

B.Ed. Degree Programme

Semester-IV

EMERGING TRENDS IN PHYSICAL SCIENCE EDUCATION

(4 Credits - 120 Hours)

 **COURSE LEARNING OUTCOMES**

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

1. Identify the appropriate teaching model for teaching physical science
2. Develop lesson plan based on models for teaching physical science
3. Discuss the emerging strategies in teaching Physical science
4. Choose appropriate strategies for teaching physical science
5. Examine the ways to link technology, pedagogy and content in classroom teaching
6. Employ different technological strategies in teaching physical science
7. Develop a plan to organise various co-curricular activities in physical science
8. Identify the importance of co-curricular activities in learning physical science
9. Describe the importance of professional development of science teachers
10. Evaluate the qualities and professional skills of science teacher

Unit- I: MODELS OF TEACHING

Learning Outcomes	Content	Suggested Strategies and Approaches	Assessment
1. Defines models of teaching 2. Classifies different teaching models 3. Chooses the appropriate model for teaching physical science 4. Prepares lesson plan based on models of teaching	1.1 Models of teaching - Definition, Fundamental Elements of models of teaching. 1.2 Types of Teaching Model. 1.2.1 Inquiry Training Model 1.2.2 Concept Attainment Model 1.2.3 Advance Organizer Model	<ul style="list-style-type: none"> • Digital presentation • Group discussion • Workshop 	<ul style="list-style-type: none"> • Test (oral/written) • Assignment

Unit-II: EMERGING STRATEGIES FOR TEACHING PHYSICAL SCIENCE

Learning Outcomes	Content	Suggested Strategies and Approaches	Assessment
1. Recognizes various innovative strategies of teaching Physical science	2.1 Collaborative learning 2.2 Co-operative learning 2.3 Problem based Learning	<ul style="list-style-type: none"> • Seminar • Group Discussion • Brainstorming • Digital Presentation 	<ul style="list-style-type: none"> • Participant observation • Report writing • Mapping
2. Discusses the need and importance of innovative strategies in teaching	2.4 Concept mapping 2.5 Flipped learning 2.6 Blended learning 2.7 Experiential learning 2.8 Brain based learning		
3. Determines the appropriate strategies for teaching physical science			
4. Outlines the different emerging strategies in teaching physical science			

Unit- III: TECHNO PEDAGOGIC CONTENT KNOWLEDGE

Learning Outcomes	Content	Suggested Strategies and Approaches	Assessment
1. Identifies the ways and means to link technology, pedagogy and content 2. Correlates technology, pedagogy and content in teaching 3. Explains the importance technology in teaching and learning physical science 4. Employs different technologies in teaching physical science	3.1 Techno Pedagogic Knowledge 3.2 Science teacher as techno pedagogue 3.3 Techno pedagogic skills and competencies 3.4 Web based learning 3.5 M-learning 3.6 Software in science 3.7 Learning Management System	<ul style="list-style-type: none"> • Discussion • Demonstration • ICT resources 	<ul style="list-style-type: none"> • Observation • Assignment • Material submission

Unit- IV: CO-CURRICULAR ACTIVITIES IN PHYSICAL SCIENCE

Learning Outcomes	Content	Suggested Strategies and Approaches	Assessment
1. Identifies the importance of co-curricular activities in physical science 2. Develops a plan to organise various co-curricular activities 3. List out various activities included in science club 4. Participates in organising field visit	4.1 Co-curricular activities 4.1.1 Definition 4.1.2 Need and relevance 4.1.3 Advantages of co-curricular activities 4.2 Criteria for selection of co-curricular activities 4.3 Science club 4.4 Science Exhibition and Fairs 4.5 Field visit	<ul style="list-style-type: none"> • Lecture • Organizing science exhibition • Extension activity • Organization of seminars/ workshops related to the subject 	<ul style="list-style-type: none"> • Test (oral/written) • Participation in co-curricular activities • Report writing • Seminar presentation

Unit- V: PROFESSIONAL DEVELOPMENT OF TEACHERS

Learning Outcomes	Content	Suggested Strategies and Approaches	Assessment
1. Recognizes the need for professional development of teachers 2. Explains the meaning of teaching as a profession 3. Compares pre-	5.1 Teaching as a profession 5.2 Pre-service and in-service programme 5.3 Role of reflective practices on professional development 5.4 Qualities of a science teacher 5.4.1 Professional	<ul style="list-style-type: none"> • Lecture • Discussion • Debate 	<ul style="list-style-type: none"> • Participant observation • Report based on debate

service and in-service programme 4. Identifies the qualities of a science teacher	competencies 5.4.2 Soft skills 5.4.3 Technological skills.		
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SUGGESTED ACTIVITIES (any two):

1. Visit a scientifically important place and prepare a report
2. Design a content in physical science based on mapping strategies.
3. Visit an exhibition in your locality and prepare a report.
4. Develop a lesson plan in physical science based on models of teaching.

📖 PRESCRIBED READING

1. Gupta.S.K. (1985). Teaching of Physical Science in Secondary Schools. Sterling Publication Pvt. Limited.
2. Radha, Mohan (2010). Teaching of Physical Science. New Delhi: Neelkamal Publishers.
3. Sharma.R.C. (2006). Modern Science Teaching. New Delhi: DhanpatRaiPublications.
4. Sivarajan,K., &Faziluddin. A. (2006). Science Education, Calicut University, Central Co.
5. Vanaja.M. (2010).Educationaltechnology. New Delhi: Neelkamal Publishers.

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1. Bhatia.K.K. (2001). Foundations of Teaching Learning Process. Ludhiana: TandonPublication.
2. Das.R.C. (1985). Science Teaching in Schools. New Delhi: SterlingPublishers.
3. Joseph.T. T. (1982). Modern Trends in Science Education. (2nd Ed.). Kottayam,Kerala.
Mangal.S.K.,&UmaMangal. (2009). Essentials of Educational Technology. New Delhi: PHI Learning Pvt.Ltd.
4. Mathew.T.K.,&Mollykutty.T. M. (2011). Science Education:TheoreticalBasesofTeaching and Pedagogic Analysis. Chenganoor: Rainbow Book Publishers.
5. Mishra.R.C(2008). Lesson Planning. NewDelhi: APH Publishing Corporation.
6. Panner,Selvam.A.(1976).TeachingofPhysical Science, Government of TamilNadu.

Course Code: BED4EC001

Elective Course

B.Ed. Degree Programme
Semester-IV
EARLY CHILDHOOD CARE AND EDUCATION

(4 Credits – 120 Hours)

 **COURSE LEARNING OUTCOMES:**

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

1. Diagnose the various issues of Early Childhood Care and Education
2. Compare the contributions made by western and Indian thinkers to Early Childhood Care and Education
3. Examine the role played by Early Childhood Care and Education centre in the holistic development of children.
4. Develop insight in planning programs for pre-school children
5. Acquaint with the different techniques of teaching children.

Unit- I: INTRODUCTION TO EARLY CHILDHOOD CARE AND EDUCATION

Learning Outcomes	Content	Suggested Strategies and Approaches	Assessment
1. Analyses the need of ECCE 2. Diagnoses the various issues of ECCE 3. Discusses the policies of ECCE	1.1 Early Childhood Care and Education: concept, need and objectives of ECCE 1.2. Early Childhood Education trends in India-public,private and voluntary sector initiatives in India 1.3.Issues and concerns of ECCE in India 1.4.Policies in ECCE in India- National Focus Group on ECCE (2006) 1.5 ECCE in National Education Policy 2020	<ul style="list-style-type: none"> • Introductory Lecture • Group discussion • Assignment • Brainstorming • Seminar and discussion 	<ul style="list-style-type: none"> • Assignment evaluation • Test (Written/ Oral) • Participation in group discussion

Unit- II: CONTRIBUTIONS OF EDUCATIONAL THINKERS TO EARLY CHILDHOOD CARE AND EDUCATION

Learning Outcomes	Content	Suggested Strategies and Approaches	Assessment
1. Compares the contributions made by western and Indian thinkers to ECCE 2. Appraises the contributions of Educational thinkers	2.1 Contributions of western thinkers – Froebel, McMillan Sisters, Montessori, Piaget and Vygotsky 2.2. Indian thinkers – Gijubhai Badeka, Mahatma Gandhi and Tarabai Modak.	<ul style="list-style-type: none"> • Introductory lecture • Group discussion • Assignment • Brainstorming • Seminar and discussion 	<ul style="list-style-type: none"> • Assignment evaluation • Test (Written/ Oral) • Participation in group discussion

Unit- III: DEVELOPMENT DURING EARLY CHILDHOOD

Learning Outcomes	Content	Suggested Strategies and Approaches	Assessment
1. Detects the factors influencing development during early childhood 2. Examines the role played by ECCE centers in the holistic development of children.	3.1. Development during early childhood period - physical, motor, cognitive, social, emotional, language and moral development. 3.2. Factors influencing early childhood development. 3.3. Role of early childhood centres in promoting harmonious development of children.	<ul style="list-style-type: none"> • Lecture • Seminars • Interactive session • Discussion • Assignment 	<ul style="list-style-type: none"> • Preparation of learning materials • Assignment evaluation • Test (Written/Oral)

Unit- IV: ORGANIZING ECCE PROGRAMME

Learning Outcomes	Content	Suggested Strategies and Approaches	Assessment
1. Develops insight in planning programs for pre- school children	4.1.DesignofanECCEcentre– building plan, different areas in an ECCE centre, safety precautions, 4.2 Planning programs for children – principles and factors of program planning. (yearly, monthly, weekly and daily plans.)	<ul style="list-style-type: none"> • Lecture • Field visit • Development of weekly /daily schedules • Seminar and discussions • Discussion • Visual presentations • Peer learning 	<ul style="list-style-type: none"> • Report writing • Assessing weekly / daily schedule • Assignment evaluation • Test (Written/Oral)

Unit- V: PEDAGOGIC APPROACHES TO ECCE PROGRAMME

Learning Outcomes	Content	Suggested Strategies and Approaches	Assessment
1. Identifies the role of ECCE teacher. 2. Acquaints with the different techniques of teaching children.	5.1 Strategies for involvement of children in learning activities- sensory training, Rhymes, Storytelling, Dramatization, Puppetry, Nature walk and play way method 5.2 Evaluation of children's development and learning - Principles of assessment and reporting 5.3 Informal assessment Strategies - observation, portfolio, checklist. 5.4. Role of care giver/ ECCE Teacher-partnership with parents and family	<ul style="list-style-type: none"> • Lecture • Field visit • Observation of Programs • Seminar and discussions • Role play • Discussion • Demonstration • Visual presentations • Peer learning 	<ul style="list-style-type: none"> • Assignment evaluation • Test (Written/Oral)

SUGGESTED ACTIVITIES (any two)

1. Prepare materials and activities for any two aspects of development.
 - 1.1 Motor development (gross motor skills and fine motor skills)
 - 1.2 Cognitive development
 - 1.3 Language development
 - 1.4 Social development
2. Prepare a report on daily routine of an Early childhood Education Centre.
3. Prepare booklets-stories (5), Rhymes (5) with illustrations.
4. Prepare source file on different types of creative activities for children.

📖 PRESCRIBED READING

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2. Devadhas, P.Rajammal. (1984). *A Text Book on Child Development*.New Delhi: MC Millan India Ltd.
3. Hurlock, Elizabeth.B. (2001). *Child Growth and Development*.New Delhi:Tata McGraw Hill publishing company.
4. Kaul, Vinetha. (2001). *Early Childhood Education Programme*.New Delhi: National Council of Educational Research and Training.
5. Kaul.V.,&Sankar.D.(2009).*Early Childhood Care and Education in India: Mid-Decade Assessment*, NUEPA.
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7. Mohanthy,Jaganath.,&Bhagyadhar,Mohanthy. (2000).*Early Childhood Care and Education*.New Delhi:Deep and Deep Publication.
8. Montessori.M.(1962).*The Discovery of the Child*.Chennai:Kalakshetra Publications
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10. Pankajam. G. (1994).*Pre.-school education – Philosophy and Practice*.Ambalka: The Indian publication.
11. Santrock.J.W. (2010). *Child Development: An Introduction*.New Delhi: McGraw-Hill Publication Company.
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13. Swaminathan, Mina.,&Daniel, Prema.(2005). *Play Activities for Child Development*,New Delhi: National Book Trust.

📖 SUGGESTED READING

1. Austin, Gilbert.R.(1976). *Early Childhood Education: An International Perspective*. New York: Academic Press.
2. Banta.T.(1966). *Are These Really a Montessori Method, Columbus, Ohio: Ohio Psychological Association and Ohio Psychiatric Association*. David.T. (1989). *Teaching Young Children*. New Delhi: Sage.
3. Essa.E.(1990). *Introduction to Early Childhood Education*. New York: Delimar.
4. Kaul.V. ,&Bhatnagar.R.(n.d). *Early Childhood Education: A Trainers' Handbook*. New Delhi: NCERT.
5. Kaul.V et al.(2004). *Reaching Out to the Child*. New Delhi: Oxford University Press.
6. Kaul.V.,&Sankar.D(2009). *Early Childhood Care and Education in India: Mid-Decade Assessment: NUEPA*.
7. Nisha.M.(2006). *Milestones of Child Development*. Delhi: Kalpazz Publication.
8. Shanmugavelayudham.K.,&Bhuvanewari.(2003). *The 'must' for Nursery Education*. TN- FORCES.
9. Soni. R.(2014). *Every Child Matters*. New Delhi: NCERT.
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11. Swaminathan. M., & Daniel. P.(2000). *Activity-Based Developmentally Appropriate Curriculum for Young Children*. Chennai: IAPE.
12. Vergas-Baron.E.(2005). *Planning Policies for Early Childhood Development: Guidelines for Action*. Paris: UNESCO.

Course Code: BED4EC002

Elective Course

B.Ed. Degree Programme
Semester-IV
EDUCATION OF ADOLESCENTS

(4Credits -120 Hours)

 COURSE LEARNING OUTCOMES:

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

1. Detect the concerns and challenges in adolescent education
2. Discuss on the various aspect of Adolescent Education Programme (AEP)
3. Analyse the adolescent education programme, approaches, strategies and implementation.
4. Determine the suitable pedagogical approach to adolescents education
5. Develops different innovative strategies for adolescent education.
6. Integrate different life skills for adolescent education
7. Examine the role of life skills education in adolescent behavior and teacher student relationship
8. Argue the need for sex and health education for adolescents.
9. Justify the need for strengthening healthy family relationship

Unit- I: CONCERNS AND CHALLENGES DURING ADOLESCENCE

Learning Outcomes	Content	Suggested Strategies and Approaches	Assessment
1. Recognizes the development during adolescents 2. Identifies the need, concerns and realities of adolescents in India 3. Diagnosis various psycho-physiological related problems	1.1 Development during adolescence 1.1.1. Physical, cognitive, social and emotional 1.2 Needs, concerns and realities of adolescents in India. 1.3 Psycho-physiological problems – Anxiety, Depression, Suicide	<ul style="list-style-type: none"> • Lecture /briefing • Group discussion • Assignment • Brainstorming • Case study • Seminar and discussion 	<ul style="list-style-type: none"> • Oral questions • Assignment evaluation • Case study report • Test (written/ oral) • Observation of class room behaviour • Student's reflective reporting • Observation of students/ classes

Unit-II: ADOLESCENCE EDUCATION PROGRAMME

Learning Outcomes	Content	Suggested Strategies and Approaches	Assessment
1. Discusses on the various aspect of Adolescent Education Programme (AEP) 2. Examines the role of social agencies in adolescents education 3. Supports the capacity building programme for prospective teachers	2.1. Adolescence Education Programme (AEP) 2.1.1. Objectives, Content and Scope 2.2.2. Role of Social agencies in Adolescence Education-School, Family, Media and Community 2.2.3 Capacity building for prospective teachers in adolescence education	<ul style="list-style-type: none"> • Lecture /briefing • Group discussion • Assignment • Brainstorming • Case study • Seminar and discussion • Role play 	<ul style="list-style-type: none"> • Oral questions • Assignment evaluation • Case study report • Test (written/oral) • Observation of class room behaviour • Student's reflective reporting

Unit-III: PEDAGOGICAL APPROACHES TO ADOLESCENCE EDUCATION

Learning Outcomes	Content	Suggested Strategies and Approaches	Assessment
1. Determines the suitable pedagogical approach to adolescents education 2. Analyses the various approaches for adolescent education	3.1 Pedagogical Approaches to Adolescence Education 1.1.1 Case studies and critical incidents, 1.1.2 Brainstorming, 1.1.3 Role-playing, 1.1.4 Buzz groups 1.1.5 Gaming, 1.1.6 Value clarifications, 1.1.7 Question Box, 1.1.8 Discussions and Debates, 1.1.9 Puppet shows, 1.1.10 Video shows. 1.1.11 situation analysis	<ul style="list-style-type: none"> • Lecture /briefing • QA session • Student observation and reporting • Assignment • Seminar • Peer learning • Group discussion 	<ul style="list-style-type: none"> • Test (written/oral) • Assignment evaluation

Unit- IV: LIFE SKILLS EDUCATION FOR ADOLESENTS

Learning Outcomes	Content	Suggested Strategies and Approaches	Assessment
1. Explains the need, concept and significance of life skills education 2. Integrates different life skills for adolescents education 3. Examines the role of life skills education in adolescent behavior and teacher student relationship.	4.1 Need, concept and significance of life skills education 4.2 Core life skills, development of life skills 4.3 Imparting life skills education – Role play, Debate, casestudy, Quiz, Group discussion 4.4 Role of life skills education in adolescent behaviour, Teacher student relationship.	<ul style="list-style-type: none"> • Lecture /briefing • QA session • Assignment • Seminar • Peer learning • Group discussion • Role play 	<ul style="list-style-type: none"> • Test (written/oral) • Assignment evaluation

Unit- V: REPRODUCTIVE HEALTH AND FAMILY LIFE EDUCATION

Learning Outcomes	Content	Suggested Strategies and Approaches	Assessment
1. Identifies the basic elements of reproductive health during adolescents. 2. Argues the need for sexual health education for adolescents. 3. Justifies the need for strengthening healthy family relationship	5.1 Sexual and reproductive health of adolescents 5.2. Sexual health education – need and importance, objectives, role and responsibility of family and school. 5.2.1. STD's and HIV/AIDS- Causes and preventive measures 5.3 Family life education- Meaning and concept, objectives 5.3.1. Role of home and school in family life education 5.3.2. Maintaining family relationships	<ul style="list-style-type: none"> • Lecture /briefing • Group discussion • Extension and field outreach • Assignment • Seminar • Debate • Peer learning 	<ul style="list-style-type: none"> • Class test • Assignment evaluation • Observation of classes • Field level observation and reporting

SUGGESTED ACTIVITIES (any two)

1. A detailed web-based case study on child abuse victims (case studies in India and abroad).
2. Detailed study of adolescent problems and issues in the school selected for practice teaching.
3. Organization of adolescence education session in the school selected for practice teaching.
4. Study and report adolescents in drug rehabilitation centers.

📖 PRESCRIBED READINGS

1. Arora, Pankaj. (2008). *Sex Education in Schools*. New Delhi: Ocean Books Pvt Ltd.
2. CBSE. (1999). *Population and Adolescent Education—A Training Package*. New Delhi.
3. Choudhary. G. B. (2014). *Adolescence Education*. New Delhi: PHI Learning Pvt. Limited.
4. Department of Education & State AIDS Control Society. (2005). *YUVA – School Adolescence Education Programme— Handbook for Teachers*. New Delhi.
5. Harrison, Jennifer. K., (2000). *Sex Education in Secondary Schools*. Buckingham Philadelphia: Open University Press.
6. MHRD (2004). *Life Skills Modules, Adolescence Education Programme*. New Delhi: MHRD, NACO & UNICEF.
7. NCERT (2005). *Adolescence Education in Schools – Life skills Development General Framework; National Population Education Project*. New Delhi: Department of Education in Social Science and Humanities.
8. Prabhu, Vithal, (1998). *Sex Education to Adolescence: With Guidelines for Program/ Curriculum*; Mumbai: Majestic Prakashan.
9. Sahni. K. (2014). *Problems of Adolescence*. Delhi: Parent Teacher Association of India.
10. Sharma, Neeraja. (2011). *Understanding Adolescents*. Delhi: National Book Trust of India.
11. Verma, Suman., & Saraswathi. T. S. (2002). *Adolescence in India*. New Delhi: Rawat Publications.

📖 SUGGESTED READINGS

1. Harrison, Jennifer. K. (2000). *Sex Education in Secondary Schools*; Buckingham Philadelphia: Open University Press.
2. MHRD, NACO and UNICEF (2005). *Growing up in a World with HIV/AIDS*, FAQ Booklets for students, Adolescence Education Programme.
3. NCERT & NACO (1994). *AIDS Education in School: A Training Package*. New Delhi: NCRT.
4. NCERT. (2005). *Adolescence Education in Schools - Life skills Development General Framework*. New Delhi: Department of Education in Social Science and Humanities.
5. UNESCO (1991). *Adolescence Education*. Bank ok: UNESCO Principal Regional Office for Asia and the Pacific.
6. UNESCO (2001). *Life Skills on Adolescence Education Reproductive Health*. Bank ok: UNESCO Principal Regional Office for Asia and the Pacific.

Course Code: BED4EC003

Elective Course

B .Ed. Degree Programme
Semester-IV
ENVIRONMENTAL EDUCATION
 (4 Credits-120 Hours)

✍ COURSE LEARNING OUTCOMES:

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

1. Describe the historical background and concept of Environmental Education.
2. Diagnose the need and scope of Environmental Education
3. Enumerate the approaches of teaching Environmental Education
4. Evaluate the problems associated with natural resources
5. Adopt the role of an individual in conservation of natural resources
6. Propose the control measures for pollution.
7. Investigate the environmental management initiatives.
8. Summarize the meaning and need for sustainable development
9. Imitate sustainable environmental practices
10. Justify the need for Environmental Education in school curriculum

Unit- I: FUNDAMENTALS OF ENVIRONMENTAL EDUCATION

Learning Outcomes	Content	Suggested Strategies and Approaches	Assessment
1. Describes the historical background and concept of Environmental Education. 2. Enumerates the objectives and principles of Environmental Education 3. Diagnoses the need and scope of Environmental Education 4. Distinguishes the approaches of teaching environmental education	1.1 Environmental Education: Historical background, Concept, Meaning and Definition 1.2 Need, Objectives, Principles and Scope 1.3 Approaches of teaching Environmental Education (Multidisciplinary and Inter disciplinary).	<ul style="list-style-type: none"> • Small group discussion • Digital presentation • Meaningful verbal discourse • Peer learning • Self-study • Reflective practices 	<ul style="list-style-type: none"> • Assignment • Document analysis • Report • QA session • Observation • Test

Unit-II:NATURAL RESOURCES AND ASSOCIATED PROBLEMS

Learning Outcomes	Content	Suggested Strategies and Approaches	Assessment
1. States the definition and importance of natural resources 2. Examines the types of natural resources and problems associated with them. 3. Formulates the control measures to prevent the problems 4. Adopts the role of an individual in conservation of natural resources affective 5. Infers the role of environmental education during Covid-19 pandemic	2.1.Natural resources – meaning, definition and importance. 2.2 Types of resources (Forest, Land, Water Mineral, Food and Energy resources) 2.3.Problems associated with different types of natural resources - their prevention 2.4 Role of individual in conservation of natural resources. 2.5 Role of environmental education in response to the COVID-19 pandemic.	<ul style="list-style-type: none"> • Narrative expression sessions • Role Play/Skit • Field visit • Multimedia approach. • Cooperative learning • Invited talk 	<ul style="list-style-type: none"> • Participation in group activity • Report • Quiz • Document • Test

Unit-III: POLLUTION AND MANAGEMENT INITIATIVES

Learning Outcomes	Content	Suggested Strategies and Approaches	Assessment
1. Contrasts the different types of pollution 2. Surveys the effects of various types of pollution 3. Observes to suggest control measures. 4. Complies with the environment management initiatives	1.1 Pollution : definition, 3.1.1 Types (Air, Water, Soil, Noise, Nuclear and light pollution) 3.2 Effects and control measures of each type. 3.3 Management of environment: Definition and need 3.4 Initiatives: 3.4.1 Environmental legislation, 3.4.2 Environmental Impact Assessment 3.4.3 Environmental movements in India 3.4.4 pollution control board and Green Tribunals	<ul style="list-style-type: none"> • Lecture cum discussion • Blog Searching • Peer instruction • Digital Presentation • Seminar • Small group discussion • Brainstorming 	<ul style="list-style-type: none"> • Blog Posts • Class test • Document analysis • Seminar presentations • Test

Unit-IV: SUSTAINABLE DEVELOPMENT AND PRACTICES

Learning Outcomes	Content	Suggested Strategies and Approaches	Assessment
1. Explains the concept of sustainable development 2. Outlines the need for sustainable development 3. Imitates sustainable environmental practices	4.1 Sustainable Development: Meaning, Need, 4.2 Guiding Principles. 4.3 Sustainable Environmental Practices: 4.3.1 Rain water Harvesting, 4.3.2 Mangroves management, 4.3.3 Solid Waste management	<ul style="list-style-type: none"> • Lecture/briefing • Field visit • Multimedia approach. • Cooperative learning • Assignment • Peer learning 	<ul style="list-style-type: none"> • Report • Quiz • Document • QA session • Observation • Assignment evaluation

Unit-V: ENVIRONMENTAL EDUCATION IN SCHOOL CURRICULUM

Learning Outcomes	Content	Suggested Strategies and Approaches	Assessment
1. Analyses school curriculum for environmental education.	5.1 Environmental education at different levels of school education	• Lecture cum discussion	• Blog Posts
2. Illustrates the innovative methods of teaching environmental education.	5.2 Innovative methods of teaching environmental education	• Brainstorming	• Class test
3. Acknowledges the role of school in conservation	5.3 Role of school in environmental conservation	• Blog Searching	• Document analysis
4. Assesses the role of various agencies in promoting environmental education.	5.4 Role of NCERT, teachers and media in promoting environmental education	• Peer instruction	• Participant observation
5. Develops evaluation strategies for environmental education.	5.5 Role of information technology in human health.	• Poster Presentation	• Posters
	5.6 Evaluation in environmental education-meaning, aims,	• Assignment Seminar	• Seminar presentations
	5.6.1 Different types of tests for assessment	• Auto instruction	
		• Invited lectures	

SUGGESTED ACTIVITIES (any two)

1. Prepare a scrap book on issues related to the environment
2. Visit a place of severe environmental pollution in your locality, analyse the causes of pollution and suggest control measures.
3. Conduct an activity to establish a butterfly garden or social forest.
4. Prepare a time-line chart on environmental policies and programmes in India

📖 PRESCRIBED READING

1. Bhalla. S.C., & Khanna. H. (2007). *Environmental Education*, New Delhi: Regal Publication.
2. Bharucha. E. (2005). *Text book of Environmental Studies*, University Press.
3. Capra. F. (1999). *Eco-literacy: The Challenge for Next Century*. Liver pool Schumacher Lectures.
4. Dani. H. M. (1986). *Environmental Education*, Chandigarh: Publication Bureau, Punjab University.
5. Joseph Catherine, *Methods of Environmental Education* – Hyderabad: Neel Kamal Publications.
6. Krishnamachayulu. V., & G.S. Reddy, *Environmental Education*, Hyderabad: Neelkamal publications.
7. Kumar. A. (2009). *A Textbook of Environmental Science*. New Delhi: APH Publishing Corporation.
8. Orr. D (1992). *Ecological Literacy: Education and Transition to a Post Modern Worlds*. Albany. New York: State University Press.
9. Reddy. P. K & Reddy, N. D. (2001). *Environmental Education*. Hyderabad: Neelkamal publications.
10. Sharma. R. A. (2008). *Environmental Education*. Meerut: R. Lall Books Depot.
11. Sharma. B. L & Maheswari. B. K. (2008). *Education for Environmental and Human Value*. Meerut: R. Lall Books Depot.
12. Sharma. V. S. (2005). *Environmental Education*. New Delhi: Anmol publication.
13. Singh. Y. K. (2009). *Teaching of Environmental Science*. New Delhi: APH Publishing Corporation.

📖 SUGGESTED READING

1. Brown, Lester. R (2002). *Eco Economy: Building an Economy for Earth*, Orient Longmann.
2. Firor, John., & Judith .E.J. (2003). *Crowded Green House*, University Press.
3. Gardner. H.S (2006). *Frames of Mind*. Harvard University Press.
4. Goleman. D. (2010). *Ecological Intelligence*, Penguin Books, London 136.

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5. Joy.P.,&Neal.P. (1994). *The Handbook of Environmental Education*: London, New Fetter Lane.
 6. Odum. E.P. (1971). *Fundamentals of Ecology* WBSaunders.
 7. Speth.,& James. G. (2006). *Global Environmental Challenges: Transition to a Sustainable World*, Orient Longmann.
 8. UNESCO (2005). *Draft International Implementation Scheme of the United Nations Decade of Education for Sustainable Development*. Doc. 171 ex/7. Paris.UNESCO.
 9. UNESCO (2006-b). *Framework for the UNDESD International Implementation Scheme*. ED/ DESD/2006/PI/1. Paris,UNESCO.

Course Code: BED4EC004

Elective Course

B.Ed. Degree Programme
Semester-IV
PHYSICAL AND HEALTH EDUCATION
 (4 Credits - 120 Hours)

✍ COURSE LEARNING OUTCOMES:

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

1. Explain the meaning, need and importance of physical education
2. Combines the methods of imparting health education in schools
3. Demonstrate exercise for maintaining good physical and mental health.
4. Formulate concepts regarding the importance of safety education
5. Correlate different postures and its benefits
6. Demonstrate first aid in appropriate situation
7. Analyse the significance of food and nutrition
8. Prepare a chart on various communicable diseases and their remedies.

Unit- I: INTRODUCTION TO PHYSICAL EDUCATION

Learning Outcomes	Content	Suggested Strategies and Approaches	Assessment
1. Explains the meaning, need and importance of physical education 2. Differentiates intramural and extramural competitions 3. Prepares a list of activities for physical fitness	1.1 Physical Education 1.1.1 Meaning Definition 1.1.2 Aim and Objectives 1.1.3 Need and importance 1.1.4 Methods of teaching physical activities 1.1.5 Intramural and Extramural Competitions – Meaning, Definition. 1.1.6 Knock-out and League tournament	<ul style="list-style-type: none"> • Briefing/Lecture • Visual Presentation • Lecture • Group Discussions/ activities • Demonstration and practice 	<ul style="list-style-type: none"> • Test (Oral/ written) • Projects • Assignments

	1.2 Physical Fitness 1.2.1 Definition, Components and Health related Physical fitness 1.2.2 Activities for development of physical fitness 1.2.3 Components and benefits of Physical fitness		
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Unit- II: HEALTH EDUCATION

Learning Outcomes	Content	Suggested Strategies and Approaches	Assessment
1. Defines health education 2. Identifies the fundamentals of health education 3. Combines the methods of imparting health education in schools 4. Demonstrates exercise for maintaining good physical and mental health.	2.1 Health education: meaning, definition, 2.1.1 Importance and scope of health education 2.1.2 Aims and objectives of health education 2.1.3 Methods of imparting Health Education in School –Health instruction – Health Service Health Supervision 2.2.1 Factors affecting health 2.2.2 Effects of exercise on muscular, circulatory, Digestive and Nervous systems. 2.2.3 Hygiene – Health hazards	<ul style="list-style-type: none"> • Briefing/Lecture • Demonstration and practice • Presentations in small groups • Debate and Discussion • Survey related to safety education in a near by town/village • Theoretical presentation 	<ul style="list-style-type: none"> • Test (Oral / written) • Health practices of students • Participant observation • Reports • Visit to primary health centre and reporting

Unit- III: POSTURE, SAFETY EDUCATION AND FIRST-AID

Learning Outcomes	Content	Suggested Strategies and Approaches	Assessment
1. Formulates concepts regarding the importance of safety education 2. Classifies different types of postures and its benefits 3. Recognizes the importance of first aid 4. Conducts survey related to safety education	3.1 Posture 3.1.1 Meaning and Importance of posture 3.1.2 Types of posture 3.1.3 Kyphosis, Lordosis, Scoliosis, Knock-Knee and Flat-Foot. 3.1.4 Causes and Prevention 1.2 Safety Education 1.2.1 Significance and meaning 3.2.2 Importance of safety education 3.2.3 Road Safety, School, College, Classroom and Play ground 3.3 First – aid 3.3.1 Meaning, Definition, Principles, Need and importance of first-aid 3.3.2 First-aid in different cases 3.3.3 Management of fracture, Dislocation, Wounds, Sprain, Strain, Cramp, Fainting, Burns, etc.	<ul style="list-style-type: none"> • Briefing/Lecture • Demonstration and practice • Presentations in small groups • Debate and Discussion • Survey related to safety education in a near by town/village • Theoretical presentation 	<ul style="list-style-type: none"> • Test (Oral / written) • Health practices of students • Participant observation • Reports • Visit to primary health centre and reporting

Unit- IV: FOOD AND NUTRITION

Learning Outcomes	Content	Suggested Strategies and Approaches	Assessment
1. Analyses the significance of food and nutrition 2. Debates on the different nutritious products for good health 3. Evaluates the vitamin content of food products 4. Prepares a list of diet that causes obesity and healthy	4.5 Food and Nutrition 4.1.1. Understanding Nutrition 4.1.2. Micro and Macro Nutrients 4.1.3. Carbohydrates, Protein, Fat, Vitamins, Minerals, Water & Fiber 4.1.4. Balanced diet 4.1.5. Vitamin deficiency diseases 4.1.6. Malnutrition 4.1.7. Guidelines for food Selection 4.1.8. Diet for Obesity and underweight	<ul style="list-style-type: none"> • Narrative expressions • Survey • Debate • QA session • Experts Talk • Demonstration • Digital Presentations • Group activity • Verbal presentation • Preparation of database 	<ul style="list-style-type: none"> • Test (Oral/ Written) reports • Quiz • Group presentation • Discussions • Tests • Awareness campaign.

Unit- V: COMMUNICABLE DISEASES AND LIFESTYLE DISORDER

Learning Outcomes	Content	Suggested Strategies and Approaches	Assessment
1. Identifies different communicable diseases and lifestyle disorders 2. Categorizes different types of communicable diseases 3. Manages lifestyle diseases	5.1 Communicable diseases 5.1.1 Communicable diseases- definition and meaning 5.1.2 Malaria, Typhoid, Tuberculosis, Cholera, Diarrhea HIV /AIDS and COVID-19, Symptoms,	<ul style="list-style-type: none"> • Debate • QA session • Experts Talk • Demonstration • Digital Presentations • Group activity • Verbal 	<ul style="list-style-type: none"> • Test (Oral/ Written) reports • Quiz • Group presentation • Discussions • Tests • Awareness campaign.

with proper precautions.	causes and prevention Lifestyle disorder and their management (Obesity, Hypertension, Diabetes Heart Attack and Ulcer)	presentation • Preparation of database	
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SUGGESTED ACTIVITIES (any two)

1. Visit and prepare a report on physical education facilities available in the schools in your locality
2. Conduct a health survey in a village(locality)
3. Prepare an album for any three communicable diseases
4. Prepare a report on first aid

📖 PRESCRIBED READING

1. Ashwani, Bhardwaj. (2012). *A Complete Guide to Family Safety and First-Aid*. New Delhi: Goodwill Publishing House.
2. Chaube S.P., & Akhilesh, Chaube (2003). *School Hygiene and Health Education*. Agra: Vinod Pustak Mandir.
3. Goel, S.L. (2007). *Health Education Theory and Practice*. New Delhi: Deep and Deep Publications.
4. Krishnammal, T. (2013). *Physical and Health Education*. Madurai: Priyakamal Publications.
5. Mangal, S.K. (1978). *Health and Physical Education*. Jullundur: Parkash Brothers Educational Publishers.
6. Ravi, Saxena. (2005). *Health and Physical Education*. New Delhi: Anmol publications.
7. Venkataiah, S. (2004). *Physical Education*. New Delhi: Anmol publications.

📖 SUGGESTED READINGS

1. Achaya .K.T.(1975). *Your Food and You*. New York,(NY): National Book Trust.
2. Arnold Gesell(1988). *Psychiatry and Modern Life*. New York: Sterling

Publishers private limited.

3. Auscter, David., & Jean, pyfer. (1985). *Principles and Methods of Adapted Physical Education and Recreation*. Moscow: Mosby Publishers.
4. Clarke. H. David. (1975). *Exercise Physiology*. New Jersey: Prentice Hall INC.

Course Code: BED4EC005

Elective Course

B.Ed. Degree Programme
Semester-IV
LIBRARY AND INFORMATION SCIENCE IN EDUCATION
 (4 Credits-120 Hours)

📖 COURSE LEARNING OUTCOMES:

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

1. Trace the development of library from ancient days to contemporary era
2. Estimates the nature and purpose of different types of library
3. Analyse the feasibility of different information sources in teaching learning process
4. Apply various electronic and web learning resources.
5. Appraises information services
6. Use the education and information literacy retrieval techniques
7. Decide the context of bibliographical citation and reference writing
8. Adapt resource sharing and library mechanisms
9. Identify the major activities of infliibnet.

Unit- I: EMERGING CONCEPT OF LIBRARIES IN EDUCATION

Learning Outcomes	Content	Suggested Strategies and Approaches	Assessment
1. Analyses the development of library from ancient days to contemporary era	1.1 Library–meaning, definition 1.2 Transformation of manuscript to digital and virtual libraries	<ul style="list-style-type: none"> • Lecture • Assignment • Group Discussion • QA Session 	<ul style="list-style-type: none"> • Assignment evaluation • Test (written/oral) • Seminar presentation
2. Classifiesthe five laws of library science and types of libraries	1.3 Five laws of library science. 1.4 Types of Library 1.4.1. Public Library 1.4.2. Academic Library		

	1.4.3. Special Library 1.4.4. Digital Library 1.4.5. Virtual library		
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Unit- II: INFORMATION SOURCES

Learning Outcomes	Content	Suggested Strategies and Approaches	Assessment
1. Classifies information sources 2. Implement the knowledge of various e- resources and their effectiveness	2.1 Information Sources– definition 2.2 Types of Information Sources i. Documentary Sources 1. Primary Sources 2. Secondary Sources 3. Tertiary Sources 2.2.2. Non Documentary Sources 2.3 Electronic/Web Learning Resources 2.3.1 e-journals 2.3.2 e-books 2.3.3 Scopus, web of science and Eric databases	<ul style="list-style-type: none"> • Lecture • Group discussion • Assignment • QA session • College Library Visit and Classification of Sources 	<ul style="list-style-type: none"> • Assignment evaluation • Test (written/oral) • Seminar presentations

Unit- III: INFORMATION SERVICES

Learning Outcomes	Content	Suggested Strategies and Approaches	Assessment
1. Categorizes the various types of information services based on their purpose	3.1 Types of Information services 3.1.1 Current Awareness Service 3.1.2. Selective Dissemination of Information 3.1.3 Reprographic Service 3.1.4. Translation Service 3.1.5. Indexing and Abstracting Service	<ul style="list-style-type: none"> • Lecture • QA session • Digital and visual presentation • Group Discussion 	<ul style="list-style-type: none"> • Quiz • Test (Written/Oral) • Assignment Evaluation

Unit- IV: INFORMATION LITERACY AND RETRIEVAL TECHNIQUES

Learning Outcomes	Content	Suggested Strategies and Approaches	Assessment
1. Describe the user education and information literacy 2. Appraise the role of ICT in modern libraries 3. Explain Search engine 4. Practice Boolean operators 5. Differentiate bibliography and references 6. Classify the	4.1 User Education and Information Literacy 4.2 Role of Information Communication Technology in modern libraries 4.3 Search engines 4.4 Information Retrieval Techniques-. Boolean operators and its role in information retrieval. 4.5 Bibliography and References 4.6 Reference styles - American Psychological Association and MLA (Modern Language Association System)	<ul style="list-style-type: none"> • Lecture • Assignment • Digital and visual presentation • Group discussion • College e-library visit: demonstration / practical 	<ul style="list-style-type: none"> • Assignment evaluation • Test (written / oral) • Seminar presentations

different reference styles			
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Unit- V: RESOURCE SHARING AND LIBRARY NETWORKING

Learning Outcomes	Content	Suggested Strategies and Approaches	Assessment
1. Describes resource sharing 2. Categorizes different types of library networks 3. Designs modules on moocs/swayam prabha and e-pgpathshala 4. Examines different Inlibnet sources	5.1. Resource Sharing- definition, need and objectives 5.2. Types of Library Networks in India 5.2.1 Inlibnet and its major activities- N-List, e-Shodhsindhu, Shodhshuddhi, Shodhganga, Shodgangotri, IRINS-Vidwan Database, , e-Pg Pathshala, Vidyamitra, Ugc-Moocs, Swayam Prabha 5.2.2. ERNET 5.2.3. DELNET 5.2.4. CALIBNET 5.2.5. MALIBNET	<ul style="list-style-type: none"> • Lecture • Group discussion • College e-library visit: demonstration / practical 	<ul style="list-style-type: none"> • Assignment evaluation • Test(written /Oral) • QA session • Seminar presentation

SUGGESTED ACTIVITIES (any two)

1. Prepare an abstract for an article relevant to your area of specialization.
2. Prepare reference list in American Psychological Association (APA) / MLA style.
3. Documentation and compilation of website addresses relevant to the area of teacher education.

4. Write a review on any five books you read

PRESCRIBED READING

1. Dhiman.A.K.,& Rani, yashoda. (2005). *Information and Reference Sources and Services*. New Delhi: EssEss publications.
2. Dhiman.A.K.,&Sinha.S.C (2002). *Academic Libraries*. New Delhi: EssEssPublications.
3. Jain.M.K. (2006). *Teaching Learning: Library and Information Services*. New Delhi: Shipra publications.
4. Jagdish.S. Sharma.,&Grover.D.R. (2004). *Reference Services and Sources of Information*. New Delhi: EssEss publications.
5. Krishnan,Gopal.(2005). *Digital Libraries in Electronic Information Era*. New Delhi: Authors press.
6. Kumar, Krishna. (2007). *Library M-Management in Electronic Environment*. New Delhi: Har-Anand Publications.
7. Kumar, Krishana (1996). *Reference service*. New Delhi: EssEssPublications.
8. Mittal R.L.(1984). *Library Administration: Theory and Practice*. New Delhi: EssEsspublications.
9. Galhotra, Mohan Kumar. (2008). *Information Technology in Library and Information Services*. New Delhi: EssEss publications.
10. Ranganathan.S.R. (2006). *The Five Laws of Library Science*. Bangalore: SaradaRanganathan Endowment for libraryscience.
11. Savitha Mittal. (2005). *Digital Library Resources*. New Delhi: EssEssPublications.
12. Sharma.S.K.(2007). *Information Technology and Library Services*. New Delhi: Shree publishers and distributors.
13. Sharma.C.K et.al (2010). *E-library*. New Delhi: ShreePublishers.
14. Sheela.P,Saravanan.P.,&Mary, Lawrence .A. (2017). *Elements of Library and Information Science*. Atoor: N.V.K.S. publications.
15. ShriNathSahai (2014). *Academic Library System*. New Delhi: EssEsspublications.

SUGGESTED READINGS

1. Bhatt.R.K.(1995). *History and Development of Libraries in India*. New Delhi: Mittalpublications.
2. Chakrabarti.B. (1993). *Library and Information Society*. Calcutta: Worldpress.
3. Cheney.F.N.,&Williams.W.J. (2000). *Fundamentals of Reference Sources*.

Chicago:ALA.

4. Rajaraman.V.(2007). *Introduction to Information Technology*. New Delhi:Prentice Hall ofIndia.
5. Winship.,&Mcnab (2000). *The Students Guide to the Internet*. London: LibraryAssociation.

Course Code: BED4EPC04

Enhancing Professional Capacities

B.Ed.Semester- IV
LIFE SKILLS EDUCATION
(2 Credits-60 Hours)

 **COURSE LEARNING OUTCOMES**

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

1. Identify the core life skills
2. Select the suitable strategies for life skills education
3. Investigate on emotional capabilities and emotional intelligence.
4. Apply the psychological strategies to manage life style related stress
5. Organize brain storming on different types of emotions and prepare collages.
6. Prepare case study on study skills

Content

Core Life Skills

Strategies for Life Skill Education

Activities (any five)

Activity 1:Self Awareness- Discovering the self

Introspect and list your inner qualities that make you unique.

Activity 2 Motivation-Identification of strengths and Weakness

identify your strengths, weakness likes and dislikes

Activity 3.Goal Setting-Preparation of Goal statement

Prepare your goal statement

Activity 4.Communication skill-Communicating assertively

Role play the communication styles and evaluate your dominant communication style.

Activity 5.Interpersonal skills-Relationship Web

Appreciate different kinds of relationship you maintain in your life and suggest from your own experience the healthy relationship recipe.

Activity 6-Coping with stress-Am I stressed-

Describe the situations of your stress, the symptoms you experienced, the impacts and tips for managing stress that you practically applied.

Activity 7-Coping with Emotion-Emotion collage

Brainstorm the different types of emotions you experience and present the emotions collage that represent different emotions by pictures/drawings/sketch etc

Activity 8-Study Skills-Case study

Conduct a Case study on Study skills of your friend.

Activity 9-Time management-Planner

Create a monthly schedule of your time

Activity 10-Anger Mangement-Control anger before it controls you

Identify 10 tips to tame your temper.

Reference Books

Alka, Wadkar. (2016) *Life Skills for success*. Sage Publications Ltd.

Usha Rao (2014) *Life Skills*. Himalaya Publications