Course Code: BED1CC001 *Core Course*

B.Ed. Degree Programme

Semester-I

PERSPECTIVES ON EDUCATION

(4 Credits – 120 Hours)

Preface

The course is designed to equip Prospective Teachers with a broad understanding of the philosophical, sociological and historical underpinnings of education. This course explores diverse perspectives on the nature, purpose and goals of education, enabling students to critically examine the educational landscape. By examining different educational philosophies, theories and practices, Prospective Teachers will develop a deep appreciation for the complexity of the educational process and its impact on individuals and society.

✍ COURSE OUTCOMES

On successful completion of the course, the Prospective Teacher

1. Examines the relationship between Education and Philosophy, Education and Sociology
2. Analyses different Educational Philosophies, Theories and Practices
3. Generalises the role of family, community, school and media as agencies of Education
4. Contrasts the educational implications of Indian schools of Philosophy and Western schools of Philosophy
5. Compares the contributions of Indian thinkers and Western thinkers on Education
6. Describes the features of universities in Ancient India
7. Analyses the development of Education in Ancient Tamil Nadu
8. Explains the Education system prevailing in Ancient India
9. Outlines the development of Education during Medieval period
10. Discusses the impact of the British policies, acts and reports on Education in India

Unit- I: EDUCATION AND SOCIOLOGY (15 Hours)

Learning Outcomes	Content	Suggested Strategies and Approaches
1. Differentiates among Formal, Informal and Non-formal Education 2. Appraises the aims and functions of Education 3. Examines the relationship between Education and Philosophy 4. Analyses the role of family, community, school and media as agencies of Education.	1.1 Education: Meaning, definition, nature and scope (formal, informal and non-formal) 1.2 Functions of Education 1.3 Aims of Education - (individual, social and national) and the four pillars of education. 1.4 Sociology: Concept and Meaning 1.5 Relationship between Sociology and Education. 1.6 Definition and nature of Educational Sociology and Sociology of Education 1.7 Agencies of Education – family, community, school and media.	• Seminar • Assignment • Lecture • Peer learning • Report preparation

Unit-II: EDUCATION AND PHILOSOPHY (20 Hours)

Learning Outcomes	Content	Suggested Strategies and Approaches
1. Explains the scope of Philosophy. 2. Describes the branches of Philosophy 3. Establishes the relationship between Education and Philosophy 4. Analyses the educational implications of Indian schools of Philosophy 5. Examines the educational implications of Western schools of Philosophy	2.1 Philosophy: Meaning and Definition 2.2Branches of Philosophy- Meta-physics, Epistemology and Axiology (Definition and characteristics) 2.3Relationship Between Philosophy and Education 2.4 Indian Schools of Philosophy- Vedanta, Buddhism, Jainism (Educational Implications – Aims, Curriculum, Methodology and Discipline) 2.5Western Schools of Philosophy- Idealism, Naturalism, Pragmatism (Educational Implications – Aims, Curriculum, Methodologyand Discipline)	• Seminar • Assignment • Lecture • Peer learning • Small group discussion • Movie Clippings • Invited Talks

Unit-III: PHILOSOPHERS AND THINKERS ON EDUCATION: INDIAN AND WESTERN (15 Hours)

Learning Outcomes	Content	Suggested Strategies and Approaches
1. Familiarizes with the contributions of Indian thinkers on Education 2. Judges the contributions of Western thinkers on Education	3.1 Indian Philosophers and thinkers on Education - Thiruvalluvar Swami Vivekananda Rabindranath Tagore Mahatma Gandhi 3.2 Western Philosophers and thinkers - Rousseau Dewey Paulo Freire Ivan Illich	• Seminar • Assignment • Lecture • Peer learning • Small group discussion

Unit- IV: EDUCATIONAL HERITAGE OF ANCIENT INDIA (15 Hours)

Learning Outcomes	Content	Suggested strategies and Approaches
1. Explains the Education system prevailing in Ancient India. 2. Describes the features of universities in Ancient India. 3. Analyses the development of Education in Ancient Tamil Nadu	4.1Education in Ancient India. Vedic period, Jain period andBuddhist period (schools, role of the teacher, nature of educational institutes). 4.2 Universities in Ancient India: Vikramshila .Takshashila,Nalanda andValabhi 4.3Development of Education in Ancient Tamil Nadu-Sangham Period to British Period	• Seminar • Assignment • Lecture • Peer learning • Small group discussion

Unit- V: EDUCATION DURING MEDIEVAL AND BRITISH PERIOD
(15 Hours)

Learning Outcomes	Content	Suggested Strategies and Approaches
1. Describes the development of Education during medieval period 2. Discusses the impact of the British policies, acts and reports on Education in India	5.1 Education during Medieval Period (aims, schools, role of the teacher, nature of Educational institutes). 5.2 Education during British period: Charter Act of1813 Macaulay's Minutes Wood's Despatch – 1854 Wardha Scheme of Education Sargent Report – 1944	• Seminar • Assignment • Lecture • Peer learning • Small groupdiscussion

ASSESSMENT

1. Assignment
2. Observation
3. Report of discussion
4. Report of seminar
5. Tests

SUGGESTED ACTIVITIES(Any two)

1. Visit a Formal Education institution, observe Informal educational settings and explore non-formal Education programmes. Write a report on the differences in teaching methods, learning outcomes and learner engagement across these settings.
2. Visit a significant ancient educational site or center that showcases the rich heritage of ancient Indian education. After your visit, create a detailed report on the educational practices, institutions and key insights you discovered.
3. Visit a school, analyze its philosophy and prepare a report on the school's aims, curriculum, methodology, disciplineand teacher-learner relationships.
4. Analyse the key proposals of the Sargent Report of 1944 and evaluate their implementation in post-independence India. Create a report examining how the report's recommendations influenced the development of the Indian education system.
5. Analyse the contributions of any three Educational thinkers in the freedom movement of India. Prepare and submit a report.

📖PRESCRIBED READINGS

- Ali, L. (2021). *History of Indian Education*(1st ed.). Global Net Publication.
- Arjunan, N. K. (2017). *Philosophical and Sociological bases of Education*. Yuga Publications.
- Bhatt, S. R. (2018). *Philosophical Foundations of Education: Lessons for India*. Springer Verlag.
- Bhatia, K. K., &Narang, C. L. (2008). *Philosophical and Sociological bases of Education*. Tandon Publications.
- Brubacher, J. S. (2022). *Modern Philosophies of Education*. Nation Press.
- Chopra, S. (2014). *Philosophical and Sociological Foundations of Education*. Saurabh Publishing House.

- Ghosh, S., & Mohan, R. (2015). *Education in Emerging Indian Society: The Challenges and Issues*. PHI Learning Pvt. Ltd.
- Gupta, S. (2021). *Foundations of Education: Philosophical and Sociological perspectives*. Neelkamal Publications.
- Kaur, N., &Rekha. (2018). *Philosophical and Sociological Perspectives in Education*. APH Publishing Corporation.
- Kumar, M. (2023). *Philosophical and Sociological Perspective in Education*. Shashwat Publication.
- Nagarajan, K. (2016). *Education in Contemporary India*. Sriram Publishers.
- Nagarajan, K. (2019). *Contemporary India and Education*. SreeramPathipakam.
- Nagarajan, K., Natarajan, S., &Sittaraman, D. (2013). *Education in the Emerging Indian Society*. Sriram Publishers.
- Padiya, S. S. (2017). *History of Education India*. PachaiPasal.
- Pathak, R. P. (2019). *Philosophical and Sociological Foundations of Education*. Kanishka Publishers.
- Pruthi, R. K. (2017). *Education in Ancient India*. Sonali Publications.
- Ravi, S. S. (2021). *Philosophical and Sociological Bases of Education* (2nd ed.). PHI Learning Pvt. Ltd.
- Sharma, P. (2018). *Sociological Foundations of Education in Contemporary India*. Kanishka Publishers.
- Sharma, R. N., & Sharma, R. K. (2023). *History of Education in India*. Atlantic Publishers and Distributors (P) Ltd.
- Shrivastava, K. K. (2019). *Philosophical Foundations of Education*. Kanishka Publishers.
- Singh, S. (2017). *The Educational Heritage of Ancient India: How an Ecosystem of Learning was Laid to Waste*. Notion Press, Inc.
- Singh, Y. K. (2020). *Education and Society: An Introduction to Sociology of Education*. APH Publishing Corporation.
- Taneja, A. K. (2018). *Contemporary India and Education*. Swastik Publications.

🕮SUGGESTED READINGS

- Arulsamy, S. (2013). *Philosophical and Sociological Perspectives on Education* (1st ed.). Neelkamal Publications Pvt. Ltd.

- Bhattacharya, S. (2002). *Philosophical Foundations of Education*. Atlantic Publishers and Distributors.
- Chaube. (1999). *Education in Ancient and Medieval India*. Vikas Publishing House.
- Chaube, S. P. (2003). *History of Indian Education: Highlighting the Salient Features from the Ancient to Modern times*. VinodPusthakMandir.
- Chakraborty, A. K. (2008). *Education in Emerging Indian Society: Philosophical and SociologicalFoundation*. R. Lall Book Depot.
- Delors, J. (1996). *Learning: The Treasure within - Report to UNESCO of the International Commission on Education for 21st Century*.UNESCO.
- Jayapalan, N. (2005). *History of Education in India*. Atlantic Publishers & Distributors Pvt Ltd.
- Keay, F. E.,&Karve. (1960). *A History of Education in India and Pakistan* (4th ed.). Oxford University Press.
- Kulkarni, K. G. (2016). *The Principles of Current Education*. Neelkamal Publications Pvt. Ltd.
- Madhavan, C. (2013). *Sanskrit Education and Literature in Ancient and Medieval Tamil Nadu: An Epigraphical Study*. D.K. Printworld.
- Mookerji, R. K. (1947). *Ancient Indian Education*. Macmillan and Co.
- Mukherji, S. M. (1966). *History of Education in India*. Acharya Book Depot.
- Muthu, F. S. (2020). *History of Education in Tamil Nadu (From ancient times to 1970)*. Institute of Asian Studies, Chennai.
- Naik, J. P., & Syed, N. (1974). *A Student's History of Education in India*. MacMillan.
- Pachauri, G. (2009). *Philosophical Foundations of Education*. R. Lall Book Depot.
- Ravi, S. S. (2022). *A Comprehensive Study of Education* (2nd ed.). PHI Learning Pvt. Ltd.
- Reddy, V. S. G. (2016). *Philosophical and Sociological Perspectives on Education*. Astha Publishers and Distributors.
- Sachedeva, M. S., & Sharma, K. K. (2004). *A New Approach to Philosophical and Sociological Foundation of Education*. Bharat Book Centre.
- Saxena, S., Chaturvedi, S., & N. R. (2008). *Encyclopedia of Philosophical and Sociological Foundation of Education* (1st ed.). R. Lall Book Depot.
- Sharma, R. N. (2003). *Philosophy and Sociology of Education*. Surjeet Publications.

- Sharma, R. S. (2006). *Education in Emerging Indian Society*. Excellent Books.
- Sharma, Y. K. (2002). *The Doctrines of the Great Indian Educators*. Kanishka Publishers.
- Tedesco, J. C. (1994). *Thinkers on Education*. UNESCO Publishing, Oxford IBH Publishing.
- Tiwari, R. (2016). *Philosophical Foundation of Education*. Navyug Books International.

Course Code:BED1CC002 *Core Course*

B.Ed. Degree Programme

Semester- I

LEARNER AND DEVELOPMENT

(4 Credits - 120 Hours)

Preface

The course is designed to equip Prospective Teachers with a deep understanding of child and adolescent development. This course explores the complex interplay between biological, cognitive and emotional factors that shape learners. Through a combination of theoretical exploration, practical applications and reflective practices, Prospective Teachers will develop the knowledge and skills necessary to foster optimal learning and development in their future students.

✍ COURSE OUTCOMES

On successful completion of the course, the Prospective Teacher

1. Enumerates the basic concepts, scope and branches of Educational Psychology and its relevance in class rooms
2. Uses different methods of Psychology in classroom contexts
3. Differentiates between Growth and Development
4. Proposes remedial measures for various psychological problems
5. Implements the contributions of various Theories of development in the classroom context
6. Interprets the various theories of Intelligence and their implications
7. Generates various ways to foster creativity among students
8. Analyses various Theories of Personality development
9. Justifies the significance of Defense mechanisms
10. Appraises the role of teachers in improving the mental health among students

Unit- I: INTRODUCTION TO EDUCATIONAL PSYCHOLOGY (15Hours)

Learning Outcomes	Contents	Suggested Strategies and Approaches
1. Explains the meaning, nature and branches of Psychology 2. Defines the concept of Educational Psychology 3. Investigates the relevance of Educational Psychology in the classroom 4. Describes the various methods and techniques of Psychology	1.1 Psychology: Definition, nature and branches. 1.2 Educational Psychology: Definition, nature, scope and relevance of Educational Psychology to teacher. 1.3 Methods of Psychology: Introspection Observation Interview Case-study Clinical Experimental Cross sectional and Longitudinal	• Lecture • Group discussion • Assignment • Seminar through visual presentation • Small group discussion • Peer learning

Unit-II: FOUNDATIONS OF DEVELOPMENT: CHILDHOOD AND ADOLESCENCE (20Hours)

Learning Outcomes	Contents	Suggested Strategies and Approaches
1. Explains the characteristics and principles of development 2. Identifies the various stages of development. 3. Describes the characteristics of various dimensions of development 4. Analyses the various factors influencing various dimensions of development 5. Identifies various developmental tasks during each stage 6. Describes the characteristics of childhood and adolescence **7.** Realizes the special problems and Remedies	2.1 Growth and development: Meaning, characteristics, Principles. 2.2 Stages of development. 2.3 Dimensions of Development: Physical and motor, Cognitive Emotional, Social, Moral and Language 2.4 Factors influencing Development : Heredity and Environment (family, school, peer group, society, media) 2.5 Developmental tasks. 2.6 Childhood: Meaning, nature& characteristics 2.7 Adolescence: meaning, nature& characteristics 2.8 Special problems with reference to childhood to adolescence: Child abuse, Anxiety disorders, Depression, Delinquency, Eating disorders, Substance Abuse	• Lecture through visual presentation • Group discussion • Team teaching • Mind map • Assignment • Seminar • Talk by experts • Debate • Brainstorming • Peer learning

Unit-III THEORIES OF CHILD DEVELOPMENT (15Hours)

Learning Outcomes	Contents	Suggested Strategies and Approaches
1. Analyzes the stages and characteristics of various theories of development 2. Uses the implications of various Theories in the classroom context.	3.1 Jean Piaget's Theory of Cognitive development 3.2 Sigmund Freud's Theory of Psycho-sexual development 3.3 Eric Erikson' Theory of Psycho-social Development 3.4 Lawrence Kohlberg's Theory of Moral development 3.5 Noam Chomsky's Theory of Language Development	• Lecture through visual presentation • Group discussion • Assignment • Seminar • Talk by experts • Panel discussion • Brainstorming

Unit-IV: AREAS OF INDIVIDUAL DIFFERENCES (15Hours)

Learning Outcomes	Content	Suggested Strategies and Approaches
1. Identifies the areas of Individual differences 2. Explains the concept of Intelligence 3. Discusses the Theories of Intelligence 4. Analyses the merits and demerits of Intelligence tests 5. Explains the concept of Creativity.	4.1 Attitude and Interest: concept, types and measurements 4.2 Intelligence: concept, definitions. 4.3 Theories of Intelligence - Spearman Two Factor Theory, Guilford Structure of Intellect, Thurstone's Group Factor Theory, Gardner's Multiple Intelligence Theory 4.4 Intelligence Quotient and Assessment of Intelligence - Verbal, Non verbal and Performance 4.5 Creativity-Definition, nature, process and strategies for fostering Creativity	• Lecture/briefing • Group discussion • Assignment • Seminar • Peer learning • Talk by expert • QA session • Debate

Unit-V: PERSONALITY DEVLOPMENT (15Hours)

Learning Outcomes	Contents	Suggested Strategies and Approaches
1. Explains the meaning and characteristics 2. Analyses the theories of personality and their implications 3. Describes various techniques to assess the personality of an individual. 4. Identifies the role of teachers for improving mental health of child	5.1 Personality: definition and characteristics, 5.2 Theories of personality: Type theory Trait theory Type cum Trait Theory Psychoanalytic theory Defense Mechanisms 5.3 Assessment of Personality: projective and non projective techniques 5.4 Mental health problems and remedial measures.	• Lecture through visual presentation • Group discussion • Assignment • Seminar through visual presentation • Peer learning

ASSESSMENT

1. Assignment
2. Discussion
3. Seminar
4. Tests
5. Case Analysis
6. Video Analysis

SUGGESTED ACTIVITIES (Any two)

1. Prepare a report on various types of child abuse.
2. Design learning activities to develop multiple intelligences among students.
3. Study the personality type of high school children and prepare a report.
4. Study the mental health of high school students and prepare a report on it.
5. Analyze children's literature/ movies/ TV shows to identify developmental themes and messages.

🕮PRESCRIBED READINGS

- Agarwal, J.C. (2004) *Essentials of Educational Psychology*. Vikas Publishing House.
- Agarwal, J.C. (2004) *Basic Ideas in Educational Psychology*. Shipra Publications.
- Aruna, Balachandra (2008) *Elements of Psychology and Mental Hygiene*. Universities Press.
- Baron, A. Robert (2000) *Psychology*. Prentice Hall of India.
- Bert, Lawra E. (2014) *Child Development*. PHI.
- Bhatia, H.R. (2005) *A Textbook of Educational Psychology*. Macmillan India Ltd.
- Bhatnagar, S., &Saxena, A. (2004) *Advanced Educational Psychology*. Surya Publication, Meerut.
- Chauhan, S.S. (2007) *Advanced Educational Psychology*. Vikas Publishing House.
- Dandapani, S. (2007) *Advanced Educational Psychology*. Anmol Publications.
- Elizabeth, B. (1977) *Developmental Psychology*. Tata McGraw Hill Publishing Company.
- Feldman, S.R. (2012) *Psychology*. Tata McGraw Hill Education Pvt Ltd.
- Fernald, L. Dodge, & Fernald, Peter S. (2001) *Introduction to Psychology*. A.I.T.B.S. Publishers.
- GovindaRao, L. (2007) *Perspectives on Special Education*. Neelkamal Publications Pvt Ltd.
- Hurlock, Elizabeth B. (1973) *Adolescent Development*. McGraw Hill Book Company.
- Hurlock, Elizabeth B. (2015) *Child Development*. McGraw Hill Education.
- Kuppuswamy, B. (2010) *Advanced Educational Psychology*. Sterling Publishers Private Limited.
- Legge, Karen, &Harari, Philippe (2000) *Psychology and Education*. Heinemann Educational Publishers.
- Mangal, S.K. (2002) *Advanced Educational Psychology*. PHI Learning Private Ltd.
- Mangal, S.K. (2007) *Essentials of Educational Psychology*. Prentice Hall of India.
- Mangal, S.K. (2007) *Educating Exceptional Children*. PHI Learning Private Ltd.
- Mangal, S.K. (2004) *Psychology of Learning and Development*. Tandon Publications.
- Munsinger, H. (1975) *Readings in Child Development*. Holt Rinehart Winston.
- Nagarajan, K., &Devaseetharaman (2013) *Psychology of Learning and Human Development*. Sriram Publishers.
- Papalia, D.E., & Sally, W.O. (1978) *Human Development*. McGraw Hill Publishing Company.
- Robert, S. Feldman (2012) *Psychology and Your Life*. Tata McGraw Hill Publishing.
- Schaffer, R.H. (2004) *Introducing Child Psychology*. Blackwell Publishing.
- Scott, Ruth, & Scott, W.A. (1998) *Adjustment of Adolescents*. Routledge and Kegan Paul Ltd.
- Sharma, N. (2003) *Understanding Adolescence*. NBT.

- Sharma, R.A. (2008) *Fundamentals of Special Education*. R. Lall Book Depot.
- Sharma, Y. (2004) *A Textbook of Educational Psychology*. Kanishka Publishers.
- Skinner, E.C. (2011) *Child Psychology*. Neelkamal Publication.
- Suman, Verma, &Saraswathi, T.S. (2002) *Adolescence in India*. Rawat Publication.
- Timpe, A. Dale (2001) *Creativity*. Jaico Publishing House.
- Vijaya Kumara Kaushik,& Sharma, S.R. (2004) *Social Psychology and Education*. Anmol Publication.
- Young, Kimball (2001) *Personality and Problems of Adjustment*. Surjeet Publications.

📖SUGGESTED READINGS

- Harry Adler. *Boost Your Creative Intelligence*. Kogan Page India Pvt Limited.
- AnitWoolfolk. (2003) *Educational Psychology*. Pearson Education India.
- De Cecco, John P., & William Crawford. (1988) *The Psychology of Learning and Instruction* (Ed.). Prentice Hall of India.
- Dunlop, F. (1971) *The Education of Feeling and Emotions*. George Allen and Unwin.
- Erik Erikson. (1968) *Childhood and Society*. W.W. Norton & Co.
- Guilford, J.P. (1977) *The Nature of Human Intelligence*. McGraw Hill.
- Hurlock, B. (1976) *Personality Development*. Tata McGraw-Hill Publishing Company Ltd.
- Rajammal, P. Devadas, & Jaya, N. (1984) *Child Development*. Macmillan Press Limited.

Course Code:BED1CC003 *Core Course*

B.Ed. Degree Programme
Semester- I
ASSESSMENT AND EVALUATION
(2 Credits- 60 Hours)

Preface

The course is designed to equip Prospective Teachers with a comprehensive understanding of the principles, methods and techniques of assessing and evaluating student learning. This course explores the theoretical foundations of assessment, examining various assessment approaches and their implications for instructional planning, implementation and improvement. By examining the relationship between assessment, learning and teaching, Prospective Teachers will develop a critical awareness of the role of assessment in promoting student achievement and growth. This course emphasizes the importance of using assessment as a tool for enhancing learning, providing feedback and making informed instructional decisions.

✍ COURSE OUTCOMES

On successful completion of the course, the Prospective Teacher

1. Uses different techniques to assess and evaluate student performance
2. Appreciates the role of teacher as an evaluator
3. Analyses the trends in Evaluation
4. Practices the appropriate statistical techniques in the process of Evaluation
5. Documents student achievement, making use of accurate and reliable records.

Unit- I: INTRODUCTION TO ASSESSMENT AND EVALUATION (10 Hours)

Learning Outcomes	Content	Suggested Strategies and Approaches
1. Determines the relevance of measurement, assessment and evaluation in teaching learning process 2. Assesses learning using different techniques 3. Compares the different functions of Assessment 4. Differentiates the various types of evaluation 5. Uses different approaches to assess student performance	1.1 Measurement, Assessment and Evaluation Meaning and Relevance 1.2 Learning outcomes across the stages by NCERT in different subject areas and assessment. 1.3 Functions of Assessment- assessment for learning, assessment of learning and assessment as learning 1.4 Types of Evaluation: Formative and Summative Norm-referenced and Criterion- referenced 1.5 Measures to assess and evaluate student performance: open-book tests, problem-based assignments, observation of practical skills, individual and group project reports, oral presentations, peer and self-assessment.	• Planned lectures infused with multimedia presentations. • Discussion • Panel interaction • Small theme-based seminars • Team teaching • Case studies

Unit- II: TOOLS, TECHNIQUES AND TRENDS IN EVALUATION (15 Hours)

Learning Outcomes	Content	Suggested Strategies and Approaches
1. Creates appropriate tools for evaluation 2. Discusses the characteristics of a good evaluation tool 3. Identifies competency-based assessments appropriate for assessing learning outcomes related to all domains of learning 4. Explains the trends in assessment and evaluation 5. Predicts strategies to monitor student learning levels	2.1 Tools of Assessment-concept, merits, demerits, 2.2 Tools: Tests,Checklist, Rating scale, Questionnaire, Inventory, Schedule, Anecdotal record 2.3 Techniques of Assessment: Observation, Interview, Self reporting. 2.4 Characteristics of a good evaluation tool : Validity, Reliability, Objectivity and Practicability, Reporting student's performance: 360-degree progress reports, cumulative records and their uses, portfolios, qualitative reporting based on the observations, descriptive indicators in report-cards. 2.5 Competency-based evaluation 2.6 Continuous and Comprehensive Evaluation 2.7 Improving Assessment and Evaluation in Schools: NEP 2020	• Lecture-demonstration • Seminar • Group discussion • Workshop • Collaborative learning • Assignment • Digital presentation • Field engagement through surveys, short term project work. • Problem solving strategies • Concept/mind maps • Collaborative learning

Unit- III: STATISTICALANALYSIS AND INTERPRETATION (15 Hours)

Learning Outcomes	Content	Suggested Strategies and Approaches
1. Explains the types of graphical representation of data 2. Uses the statistical methods of analysis 3. Appraises student achievement, making use of accurate records 4. Designs holistic, multidimensional progress card of students	3.1 Analysis of students' performance and scores: credit and grading 3.2 Graphical representation (Histogram, Frequency Curve) 3.3 Statistical methods of analysis: Measures of central tendency - Mean, Median, Mode. Measures of Variability: Quartile deviation Standard Deviation Relationship - Concept Spearman's Rank Order Correlation Normal Distribution 3.4 Interpretation of student's performance based on the analysis and their further uses in improving learner's performance: credit and grading, constructive feedback	• Planned lectures infused with multimedia presentations • Collaborative learning • Assignment • Analysis of educational statistics • Report • Hands on experience

ASSESSMENT

1. Assignment
2. Portfolios to assess abilities to analyze, evaluate, create and reason.
3. Report writing
4. Seminar
5. Tests
6. Tool construction

SUGGESTED ACTIVITIES (Any one)

1. Construct any one of the assessment tools in digital form (questionnaire, rating scale, check list, inventory etc.) and administer it to a group of students (N=30) and interpret the result.
2. Prepare a format of 360-degree report card after a panel interaction.
3. Interview teachers and students to study the assessment practices, issues and problems related to it followed by a report.

📖PRESCRIBED READINGS

- AnupamaBhargava. (2021) *Assessment in Education: Principles and Procedures*. Notion Press.
- Ebel, R.L., &Freshie, D.A. (2009) *Essentials of Educational Measurement*. PHI Learning Pvt. Ltd.
- Linn,& Miller. (2008) *Measurement and Assessment in Teaching* (9th ed.). Pearson Education.
- Ronald Jay Cohen,& Mark E. Swerdlik. (2018) *Psychological Testing and Assessment* (9th ed.). McGraw Hill Education.
- McMillan, J. (2013) *Classroom Assessment: Principles and Practice for Effective Standards-Based Instruction* (6th ed.). Pearson.
- Mangal, S.K. (1984) *Psychological Foundations of Education*. Prakash Publishers.
- NCERT. (1985) *Curriculum and Evaluation*.NCERT.
- NEP. (2020) *Assessment Discussions*.Ministry of Education.
- Nitko, A.J. (2001) *Educational Assessment of Students* (3rd ed.). Prentice Hall.
- Parker, Jessica K. (2012) *Teaching Tech-Savvy Kids: Bringing Digital Media into the Classroom, Grades 5-12*. SAGE Publications Pvt. Ltd.
- Pathak. (2012) *Measurement and Evaluation in Education*. Pearson Education.
- Radha Mohan. (2023) *Measurement, Evaluation and Assessment in Education*. PHI Learning.

📖SUGGESTED READINGS

- Care, Esther, McGraw, Barry, & Griffin, Patrick. (2012) *Assessment and Teaching of 21st Century Skills*. Springer.
- Coolidge, Frederick L. (2013) *Statistics: A Gentle Introduction* (3rd ed.). SAGE Publications Pvt. Ltd.

- Jefferies, Julie, & Diamond, Ian. (2013) *Beginning Statistics: An Introduction for Social Scientists*. SAGE Publications Pvt. Ltd.
- Jimoyiannis, Athanassios. (2012) *Research on E-learning & ICT in Education*. Springer.
- Kist, William. (2012) *The Socially Networked Classroom: Teaching in the New Media Age*. SAGE Publications Pvt. Ltd.
- Nichols, Adelaide, Doyle, Cox, J. Sabrina, & Mims, Johnson, Ruth. (2012) *Developing Portfolios in Education: A Guide to Reflection, Inquiry & Assessment* (2nd ed.). SAGE Publications Pvt. Ltd.
- Palomba, C.A., & Banta, T.W. (2001) *Assessing Student Competence in Accredited Disciplines: Pioneering Approaches to Assessment in Higher Education* (1st ed.). Stylus.
- Quinlan, Audrey M.A. (2012) *A Complete Guide to Rubrics: Assessment Made Easy for Teachers, K-College*. Rowman& Littlefield Education.
- Roe, E., McDonald, R., & Moses, I. (1986) *Reviewing Academic Performance: Approaches to the Evaluation of Departments and Individuals*. University of Queensland Press.
- Reid, Howard M. (2013) *Introduction to Statistics: Fundamental Concepts and Procedures of Data Analysis*. SAGE Publications Pvt. Ltd.
- Sedlacek, W.E. (2004) *Beyond the Big Test: Non-Cognitive Assessment in Higher Education*. Jossey-Bass.
- Sims, S.J. (1992) *Student Outcomes Assessment: A Historical Review and Guide to Programme Development*. Greenwood.

Course Code:BED1CC004 *Core Course*

B.Ed. Degree Programme

Semester – I

EDUCATIONAL TECHNOLOGY

(2 credits– 60 Hours)

Preface

The course explores the effective use of Technology to enhance teaching and learning processes. This course is designed to equip Prospective Teachers with the knowledge, skills and attitudes necessary to integrate Technology seamlessly into their classrooms. By understanding the theoretical foundations of Educational Technology and gaining practical experience with various tools and applications, Prospective Teachers will be empowered to create engaging and effective learning environments.

✍ **COURSE OUTCOMES**

On successful completion of course, the Prospective Teacher

1. Enumerates the concepts and approaches of Educational Technology
2. Investigates the recent innovations in Educational Technology
3. Uses different online learning platforms and courses
4. Elaborates teaching as a communication system
5. Suggests measures to improve classroom communication.

UNIT- I: FOUNDATIONS OF EDUCATIONAL TECHNOLOGY(12 Hours)

Learning Outcomes	Content	Suggested Strategies and Approaches
1. Identifies the scope of Educational Technology 2. Differentiates information, Instructional and educational technologies 3. Identifies the components of Educational Technology 4. Differentiates between Educational technology and Technology of Education 5. Analyses Edgar Dale‘s Cone of Experience	1.1 Historical Evolution and Key Milestones in Educational Technology 1.2 Technology in Education, Technology of Education, Difference between Instructional Technology and Teaching Technology 1.3Technology Tools and Resources Overview of Hardware and Software in Educational Settings Utilization of Interactive Whiteboards, Tablets, Mobile Devices Exploration of Educational Software Applications, Digital Content Creation Tools Audio-Visual Aids: Definition, Types, Edgar Dale's "The Cone of Experience", Digital Tools and Digital Technology.	• Seminar with visualpresentation • OnlineAssignment • Lecture • Peer learning • Hands on experience

UNIT-II: COMMUNICATION TECHNOLOGY (15 Hours)

Learning Outcomes	Contents	Suggested Strategies and Approaches
1. Explains the concept of communication 2. Identifies types of communication 3. Explores factors affecting communication 4. Discusses the Barriers of communication	2.1 Communication: Concept, Definition, Types of Communication 2.2 Communication Cycles, Factors Affecting Communication, Barriers of Communication 2.3 Classroom Communication: Teaching as a Communication System, Teaching in the Digital Era, Challenging Roles and Competencies	• Seminar • Assignment • Lecture • Seminar with visual presentation • Lecture • Peer learning • Hands on experience

UNIT-III: TECHNOLOGY INTEGRATION IN EDUCATION

(13 Hours)

Learning Outcomes	Content	Suggested Strategies and Approaches
1. Identifies online resources, tools and application 2. Explores various free and open source educational software. 3. Identifies MOOCs as a space for continuous learning 4. Uses innovative pedagogical strategies	3.1 Technology- Enhanced learning (TEL). Blended learning :Models and strategies. Implementation and effectiveness of flipped learning. Utilizing MOOCs (Massive Open Online Courses) and LMS (Learning Management Systems) 3.2Innovative pedagogical strategies. Collaborative learning-tools and techniques, Google classroom, Microsoft Teams, learning experiences with virtual reality.	• Seminar • Assignment • Lecture • Seminar with visual presentation • Lecture • Peer learning • Hands on Experience • Video Analysis

ASSESSMENT

1. Observation
2. Assignment
3. Report of discussion
4. Tests
5. Seminar
6. Video presentation

SUGGESTED ACTIVITIES (Any one)

1. Preparation of Educational Blogs.
2. Analyze the impact of technological advancements on teaching and learning.
3. Reflect on the communication strategies used in classrooms.

📖 PRESCRIBED READINGS

- Ahmad, J., Ahmad, Md. S., & Khan, A. (2012). *Computer Applications in Education*. Neelkamal Publications Pvt. Ltd.

- Alexey Semenov, (2005). *Information and Communication Technologies in Schools: A Handbook for Teachers*.UNESCO.
- Arulsamy, S., & Siva Kumar, P. (2012). *Applications of ICT in Education*. Neelkamal Publications Pvt. Ltd.
- Barton, R. (2004). *Teaching Secondary Science with ICT*. McGraw Hill International.
- Conrad, Kerri. (2001). *Instructional Design for Web-Based Training*. HRD Press.
- Dangwal, Kiran L. (2004). *Computers in Teaching and Learning*. ShreVinodPustakManir.
- Gaurav, Chadha, S.M., &NafayKumail. (2002). *E-Learning: An Expression of the Knowledge Economy*. Tata McGraw-Hill Publication.
- Barrett, Helen. (2012). *ICT Resources for Assessment: mPortfolios, Step-by-Step Model*. Available: https://sites.google.com/site/mportfolios/home/step-by-step-model.
- Imison, T., & Taylor, P.H. (2001). *Managing ICT in the Secondary Schools*. Heinemann.
- Leon, A., & Leon, M. (2000). *Information Technology*. Vikas Publishing House Pvt. Ltd.
- Kirwadkar, A., &Karanam, P. (2010). *E-Learning Methodology*. Sarup Book Publishers Pvt. Ltd.
- Mangal, S.K., & Uma Mangal. (2011). *Essentials of Educational Technology*. PHI Learning Pvt Ltd.
- Mason, Robin, & Frank, R. (2006). *E-Learning: The Key Concepts*. Routledge.
- Norton, P. (2011). *Introduction to Computers* (7th ed.). Tata McGraw-Hill Education Private Limited.
- Phillips, Rob. (1997). *The Developer's Handbook to Interactive Multimedia: A Practical Guide for Educational Application*. Kogan Page.
- Rejesekaran, S. (2007). *Computer Education and Educational Computing*. Neel Kamal Publishing Pvt. Ltd.
- Richardson, W. (2009). *Blogs, Wikis, Podcasts andOther Powerful Web Tools for Classrooms* (2nd ed.). Corwin Press.
- Roblyer, M.D. (2006). *Integrating Educational Technology into Teaching*. Pearson Prentice-Hall Inc.
- Simmons, C., & Hawkins, C. (2009). *Teaching ICT*. Sage Publications.
- Sinha, P.K., &Sinha, P. (2011). *Computer Fundamentals* (6th ed.). B.P.B Publications.
- Vaughan, T. (1999). *Multimedia: Making It Work*. Tata McGraw Hill.

🕮SUGGESTED READINGS

- Lee, William W., & Owens, Diana L. (2001). *Multi-Media-Based Instructional Design*.John Wiley & Sons.
- Mallik, Utpal, et al. (2001). *Learning with Computers Level III*. NCERT.
- Phillips, R. (1997). *Interactive Multi-Media*. Kogan Page.
- Premkumar, &Ghosh, Ajit K. (1991). *Management Information and Communication System*. Manas Publications.
- Rosenberg, M.J. (2001). *e-Learning*. McGraw Hill.
- Khemani, Deepak. (2013). *A First Course in Artificial Intelligence*. McGraw Hill Education Pvt. Ltd.
- Suguna, S., Kanimozhi, Dhivya M., &Paiva, Sara. (2021). *Artificial Intelligence: Recent Trends and Applications*. CRS Press.

Course Code:BED1PC001 *Pedagogic Course*

B.Ed. Degree Programme

Semester-I

THEORY AND PRACTICES IN BIOLOGICAL SCIENCE EDUCATION

(4 Credits - 120 Hours)

Preface

It is a course designed to equip Prospective Teachers with a comprehensive understanding of the nature, goals and methods of teaching Biology. It delves into the theoretical underpinnings of science education, exploring various pedagogical approaches and their implications for curriculum design and classroom practice. By examining the interplay among Biology, Society and the Individual, Prospective Teachers will develop a critical perspective on the role of Biological Science in shaping knowledge, attitudes and skills.

✍ COURSE OUTCOMES

On successful completion of the course, the Prospective Teacher

1. Examines the nature of Science as a product and process
2. Traces the development of Biological Science
3. Classifies the instructional objectives based on Revised Bloom's Taxonomy
4. Designs instructional plan for teaching Biological Science
5. Distinguishes year plan, unit plan and lesson plan
6. Selects the appropriate methods of instruction in teaching Biological Science
7. Compares Bloom's Taxonomy with Revised taxonomy
8. Utilizes a variety of teaching strategies
9. Describes micro teaching cycle
10. Demonstrates skills and competencies necessary for teaching Biological Science

Unit-I: NATURE, SCOPE AND DEVELOPMENT OF BIOLOGICAL SCIENCE EDUCATION (15 Hours)

Learning Outcomes	Content	Suggested Strategies and Approaches
1. Describes the nature of Biological Science 2. Identifies the contribution of various Biologists 3. Explains the need of teaching Biological Science 4. Familiarizes the history of development of Biological Science	1.1 Definition and nature of Science, nature of Biological Science, Scope and importance of Biological Science 1.2 Science as a process and product 1.3 Historical development of Biological Science-Contributions of Scientists-Charles Darwin, Gregor Mendel,Joseph Priestly,MeghnadSaha,P.Maheswari 1.4 Science as a school subject 1.5 Values of teaching Biological Science 1.6 Correlation of Biological Science with other subjects.	• Lecture • Electronic visual presentation • Seminar • Assignment • Group Discussion

Unit –II: AIMS AND OBJECTIVES OF TEACHING BIOLOGICAL SCIENCE
(15 Hours)

Learning Outcomes	Content	Suggested Strategies and Approaches
1. States the aims of teaching Biological Science 2. Differentiates general instructional objectives and specific learning outcomes 3. Classifies the objectives based on Revised Bloom's Taxonomy 4. Analyses various taxonomies 5. Examines the recommendations of various commissions	2.1 Aims and objectives of teaching Biological Science Scientific temper, Scientific literacy, Scientific attitude, Scientific method 2.2 General and specific instructional objectives, Taxonomy of instructional objectives based on Bloom's Taxonomy 2.3 Recommendations of various commission on science education Kothari Commission(1964) NPE(1986) NEP 2020	• Lecture • Illustrations • Auto instruction • Digital presentation • Seminar • Discussions • Demonstration • QA session

Unit-III: PLANNING OF BIOLOGICAL SCIENCE INSTRUCTION (15 Hours)

Learning Outcomes	Content	Suggested Strategies and Approaches
1. Explains the need, relevance and stages of planning instruction in Biological Science 2. Prepares lesson plan 3. Identifies the importance of planning 4. Differentiate year plan and unit plan	3.1 Planning – Meaning and importance 3.2 Year plan -Need and relevance of year plan, Development of year plan 3.3 Unit plan - Definition, characteristics of a good unit plan, steps in unit plan,Need and relevance of unit plan, Development of unit plan 3.4 Lesson Plan -Definition, characteristics of a good lesson plan, Steps in lesson plan,Importance of lesson plan, Need and relevance, Format of a lesson plan: Herbartian steps, merits demerits, template for lesson plan. 3.5 Resource Unit-Definition and preparation	• Lecture • Lesson plan preparation • Discussion • Individual work followed bygroup work

Unit-IV: INSTRUCTIONAL METHODS AND TECHNIQUES OF TEACHING BIOLOGICAL SCIENCE (15 Hours)

Learning Outcomes	Content	Suggested Strategies and Approaches
1. Identifies the methods and techniques of teaching Biological Science 2. Analyses various methods of teaching	4.1 Methods of instruction- Need and Characteristics of good teaching method 4.2 Methods of teaching-Teacher centered and Learner centered 4.3 Lecture method, Demonstration method, Scientific Method Laboratory method, Project method, Heuristic method, Inductive and Deductive method, Assignment method, Activity Based Learning(ABL), Active Learning Methodology (ALM) 4.4 Techniques of teaching -Panel discussion, Brainstorming, Role playing, Seminar, Symposium, Buzz Session	• Lecture • Digital presentation • Seminar • Assignment • Discussions • Debates • QA session

Unit-V: TEACHING SKILLS AND COMPETENCIES (20 Hours)

Learning Outcomes	Content	Suggested Strategies and Approaches
1 Analyses Micro teaching cycle 2 Practises different teaching skills 3 Identifies the importance of Link practice	5.1 Concept of teaching 5.2 Phases of teaching 5.3 Micro teaching- meaning, definition, characteristics, steps, cycle, phases, integration of skills, advantages and disadvantages 5.4 Teaching Skills in Biological Science-Probing question,Reinforcement Stimulus variation,Explaining Blackboard usage Introduction,Link practice 5.5Teaching competencies-subject competency, pedagogic competency	• Discussion • Team teaching • Demonstration • Video recording and screening

ASSESSMENT

1. Assignment
2. Seminar
3. Debate
4. Tests
5. Demonstration
6. Video presentation followed by feedback

SUGGESTED ACTIVITIES (Any two)

1. Prepare a unit plan in Biology for high school class.
2. Prepare a lesson plan based on Active Learning Methodology.
3. Prepare a Resource unit for any one topic in Biological Science.
4. Prepare an album on the biography of any two Indian Scientists.
5. Prepare a report on the values of teaching Biology.
6. Content analysis of Text Book of Standard VII and VIII.

🕮PRESCRIBED READINGS

- Ameeta, P. (2010). *Techniques of teaching Biological Science*. Neel Kamal Publications Pvt. Ltd.
- Soni, A. (2005). *Teaching of Biological Science.* Tandon Publications.
- Das, R.C. (1992). *Teaching of Science*. M/S Krishna Bros.
- Ahmad, J. (2011). *Teaching of Biological Science*. PHI Learning.
- Mangal, S.K. (2005). *Teaching of Biology*. Loyalk Publications.
- Sharma, R.C. (1984). *Modern Science Teaching*. Dhanpatrai and Sons.
- Sivarajan, &Faziluddin, A. (2005). *Science Education*. Calicut University Central Co-operative Stores Ltd.
- Sood, J.K. (1985). *Teaching Life Science*. Kohli Publications.
- Pahuja, S. (2010). *Teaching of Biological Sciences*. R.Lall Book Depot.
- Yadav, M.S. (2003). *Teaching of Science*. Anmol Publication.

🕮SUGGESTED READINGS

- Bhatnagar, A.B., &Bhatnagar, S.S. (2010). *Teaching of Science.* R. Lall Book Depot.
- Buffaloe, Neal, Thronberry, J.B. (1972). *Principles of Biology.* University Press, Prentice Hall of India Ltd.
- Bhuvaneswara, Lakshmi, G., SubbaRao, K., &DigumartiBhaskaraRao (2006). *Methods of Teaching Biology.* Discovery Publishing House.
- Ediger, Marlow, &BhaskaraRao, D. (2005). *Teaching Science Successfully.* Discovery Publishing House.
- Kulshreshtha, S.P. (2010). *Teaching of Science.*R.Lall Book Depot.
- Saunders, H.N. (1967). *The Teaching of General Science in Tropical Secondary School.* Oxford University Press.

Course Code:BED1PC002 *Pedagogic Course*

B. Ed. Degree Programme

Semester-I

THEORY AND PRACTICES IN ENGLISH EDUCATION

(4 Credits - 120 Hours)

Preface

The course is a foundational course designed to equip Prospective Teachers with a comprehensive understanding of the nature, goals and methods of teaching English. It delves into the theoretical underpinnings of language education, exploring various pedagogical approaches and their implications for curriculum design and classroom practice. By examining the interplay between language, literature, culture and society, Prospective Teachers will develop a critical perspective on the role of English education in shaping individuals and communities.

✍ COURSE OUTCOMES

On successful completion of the course, the Prospective Teacher

1. Examines the Nature, Scope, History and Development of English Language
2. Analyses the structure of English language
3. Identifies the stages of planning instruction with a view to develop instructional plan for teaching English
4. Analyses the approaches, methods and techniques of teaching of poetry, prose, grammar, supplementary reader, composition and vocabulary items
5. Explores various techniques of teaching
6. Prepares year plan, unit plan and lesson plans
7. Classifies the instructional objectives based on revised Bloom's taxonomy
8. Compares Bloom's Taxonomy with Revised taxonomy
9. Appraises the process of micro teaching
10. Practices different skills essential for English language learning

UNIT-I : NATURE, SCOPE, HISTORY AND DEVELOPMENT OF ENGLISH LANGUAGE (10 Hours)

Learning Outcomes	Content	Suggested Strategies and Approaches
1. Describes the nature of English 2. Explains the need of teaching English 3. Explains the history and development of English language 4. Describes the structure of English language	1.1Need scope and significance of teaching English language 1.2 Brief history and development of English language 1.3 Phonetics and phonology 1.4 Morphology and Syntax 1.5 Semantics and Pragmatics socio-linguistic 1.6 Importance of English in the school curriculum	• Lecture • Electronic visual presentation • Seminar presentation by student teachers • Quiz and test • Written Individual Assignment • Group Discussion

UNIT –II: AIMS AND OBJECTIVES OF TEACHING ENGLISH (15 Hours)

Learning Outcomes	Content	Suggested Strategies and Approaches
1. States the aims of teaching English 2. Differentiates general instructional objectives and specific learning outcomes 3. Classifies the objectives based on Revised Bloom's Taxonomy 4. Identifies specific skills in English language	2.1 Values of teaching English 2.2 Aims and Objectives – Meaning and differences 2.3 Aims of teaching English (Linguistics, Cognitive, Social, Utilitarian, Cultural, Personal, Aesthetic, Moral, Intellectual, Academic aims etc.) General Instructional Objectives (GIOs) and Specific Learning Outcomes (SLOs) based on Bloom's Taxonomy 2.4 Bloom's Taxonomy (Revised) 2.5 Listening, Speaking, Reading, Writing (LSRW), Grammar and vocabulary	• Lecture • Digital presentation • Seminar presentation • Discussions • QA session

UNIT-III: PLANNING OF ENGLISH INSTRUCTION (15 Hours)

Learning Outcomes	Content	Suggested Strategies and Approaches
1. Prepares year plan and unit plan 2. Explains the need and importance of planning 3. Familiarizes with the lesson plan format	3.1 Planning – Meaning and importance 3.2 Year plan Need and relevance of year plan Development of year plan 3.3 Unit plan Need and relevance of unit plan Development of unit plan 3.4 Lesson Plan - need and relevance 3.5 Format of a lesson plan: Steps in framing an English lesson plan – motivation, presentation, application, recapitulation and assignment	• Lecture • Unit plan preparation • Lesson plan preparation • Discussion lesson plans • group work • Individual work • Demonstration lessons • Demonstration classes

UNIT-IV: METHODS AND TECHNIQUES OF TEACHING ENGLISH (20 Hours)

Learning Outcomes	Content	Suggested Strategies and Approaches
1. Differentiates methods and techniques 2. Identifies the methods and techniques of teaching English 3. Practices various techniques of teaching	4.1 Concept of methods and techniques 4.2 Methods of teaching English: Direct method Grammar translation method Bilingual method Laboratory method Audio-lingual method Activity based learning (ABL) Active Learning Method(ALM) 4.3 Techniques of teaching Story telling Flipped learning Role play Blended learning Gamification Supervised study Group discussion Brainstorming	• Lecture • Digital presentation • Seminar presentation • Assignment • Discussion • Debates • Quiz and test • Brain storming

UNIT-V : MICRO TEACHING SKILLS AND COMPETENCIES (20 Hours)

Learning Outcomes	Content	Suggested Strategies and Approaches
1 Analyses micro teaching cycle 2 Identifies the different phases of micro teaching. 3 Practices different teaching skills	5.1 Concept of micro-teaching 5.2 Phases of micro-teaching 5.3 Meaning, need and relevance of micro teaching 5.4 Teaching skills-Developing the skill of Explanation Probing questions Stimulus variation Reinforcement Black Board writing 5.5 Link practice 5.6 Teaching competencies-Subject competency,pedagogical competency	• Brain storming • Discussion • Individual/Team/ Peer teaching • Demonstration • Video recording • Self-reflection and Peer reflection on micro teaching class taken by student teachers

ASSESSMENT

1. Tests
2. Assignments
3. Projects
4. Classroom participation and discussions
5. Quizzes
6. Video Analysis

SUGGESTED ACTIVITIES (Any two)

1. Analyze various text types(poetry, prose, drama to understand the language features and literary devices
2. Design and implement English lessons incorporating a variety of teaching techniques(eg.storytelling, Role play, Gamification, Group discussion)
3. Analyze the aims of teaching English with special reference to primary class textbook
4. Enumerate the values of English language and prepare a report
5. Prepare a digital album focusing on the history and development of English language
6. Content analysis of Text Book of Standard VII and VIII.

📖PRESCRIBED READINGS

- Adams, M. J. (1990). *Thinking and Learning about Print*. MIT Press.
- Brewster, J., Ellis, G., & Girard, D. (1992). *The Primary English Teacher's Guide*. Penguin Books.
- Cameron, L. (2001). *Teaching Languages to Young Learners*. Cambridge University Press.

- Choudhary, N. R. (2002). *English Language Teaching*. Himalaya Publishing House.
- Egbert, J., & Hanson-Smith, E. (1999). *CALL Environments: Research, Practice and Critical Issues*. Alexandria, VA: TESOL, Inc., 523 pp.
- Sperling, D. (1997). *The Internet Guide for English Language Teachers*. Prentice-Hall Regents.

🕮SUGGESTED READINGS

- Amritavalli, R. (1999). *Language as a Dynamic Text: Essays on Language, Cognition and Communication*. CIEFL Akshara Series. Allied Publishers.
- Bond, L. G. (1980). *Reading Difficulties: Their Diagnosis and Correction*. Appleton-Century-Crafts.
- Brinton, D. M., Snow, M. A., &Wesche, M. B. (1989). *Content-Based Second Language Instruction*. Newbury.
- Byrne, D. (1975). *Teaching Writing*. Longman.
- Dave, P. S. (2002). *Communicative Approach to the Teaching of Bachelor of Education English as a Second Language*. Himalaya Publishing House.
- Ibrahim, A. M. (2010). Information & Communication Technologies in ELT. *Journal of Language Teaching and Research, 1*(3), 211-214. Academy Publisher. ISSN 1798-4769.
- Kohli, A. L. (2001). *Techniques of Teaching English in the New Millennium*. DhanpatRai.
- Shulman, L. S. (1986). *Those Who Understand: Knowledge Growth in Teaching*. Educational Researcher, 15(2), 4-14.
- Singh, Y. K. (2005). *Teaching of English*. APH Publishing Corporation.

Course Code:BED1PC003 *Pedagogic Course*

B.Ed. Degree Programme

Semester- I

THEORY AND PRACTICES IN HISTORY EDUCATION

(4 Credits - 120 Hours)

Preface

The course is designed to equip Prospective Teachers with a deep understanding of the nature, purpose methods of teaching history. This course explores the theoretical foundations of history education, examining various historical perspectives and their implications for curriculum development and pedagogy. By developing a strong foundation in history education, Prospective Teachers will be empowered to create classrooms where students become active participants in constructing their own understanding of the past.

✍ COURSE OUTCOMES

On successful completion of the course, the Prospective Teacher

1. Explains the nature and scope of History Education
2. Synthesizes the contributions of historians towards development of history
3. Examines the aims and objectives of teaching History
4. Classifies the instructional objectives based on revised Bloom's taxonomy
5. Compares Bloom's Taxonomy with Revised taxonomy
6. Prepares year plan, unit plan and lesson plan of teaching history
7. Analyses the approaches, methods and techniques of teaching History
8. Selects the appropriate instructional method of teaching History
9. Analyzes the different components of micro-teaching skills
10. Practices different skills essential for learning History

Unit-I: NATURE SCOPE AND DEVELOPMENT OF HISTORY EDUCATION (15 Hours)

Learning Outcomes	Content	Suggested Strategies and Approaches
1. Defines History 2. States the rationale of including History in school curriculum. 3. Identifies the relationship between History and other Social Sciences.	1.1 History - meaning, definitions, nature and scope 1.2 History of History 1.3 Importance of History 1.4 Rationale of inclusion of History in school curriculum 1.5 Relationship of History with other social sciences 1.6 Contributions of Historians – Herodotus, Thucydides, Macaulay, Trevelyan, Kalhane, Vincent Smith, Ray Chaudary	• Discussion • Digital presentation • Peer learning • Seminar • Debate • Talk by experts • Debates • Digital presentation

Unit –II: AIMS AND OBJECTIVES OF TEACHING HISTORY (15 Hours)

Learning Outcomes	Content	Suggested Strategies and Approaches
1. Differentiates aims and objectives of teaching history. 2. Summarizes the recommendations of commissions and policies on History Education. 3. Classifies the objectives based on Revised Blooom's Taxonomy. 4. Compares Bloom's Taxonomy with Revised taxonomy	2.1 Aims and Objectives of teaching History at secondary and higher secondary level 2.2 Values of teaching History 2.3 Recommendations of commissions and policies on History Education Kothari commission (1964-1966) NEP-1986 NEP 2020 2.4 Bloom's Taxonomy and Revised Bloom's Taxonomy of Educational Objectives	• Digital presentation • Group discussion • Lecture • Digital presentation

Unit-III: PLANNING FOR INSTRUCTION IN HISTORY (20 Hours)

Learning Outcomes	Content	Suggested Strategies and Approaches
1. Designs year plan 2. Prepares unit plan. 3. Compares unit plan with lesson plan 4. Prepares resource unit	3.1 Need and importance of Instructional plan 3.2 Year plan and Unit Plan- Characteristics and steps 3.3 Lesson plan – meaning and importance Criteria of a good lesson plan. 3.4 Herbartian Steps in lesson planning - Lesson plan templates 3.5 Comparison of Unit plan and Year Plan 3.6 Resource Unit-Definition, importance and preparation	• Discussion • Team teaching • Demonstration • Video recording and screening

Unit-IV: INSTRUCTIONAL METHODS AND TECHNIQUES IN TEACHING HISTORY (15 Hours)

Learning Outcome	Content	Suggested Strategies and Approaches
1. Analyses the factors determining selection of teaching methods. 2. Differentiates teacher centered and learner centered methods. 3. Employs relevant techniques of teaching. 4. Identifies the relevance of different teaching methods.	4.1 Factors determining selection of teaching Methods 4.2 Methods and Techniques of teaching: Teacher centered and Learner centered methods- Lecture method Lecture cum Discussion method Demonstration method Project method Heuristic method Source method Activity Based learning Inductive and Deductive method Techniques:Brain Storming, Role play, Debate	• Discussion • Team teaching • Demonstration • Video recording and screening

Unit-V: TEACHING SKILLS AND COMPETENCIES (15 Hours)

Learning Outcomes	Content	Suggested Strategies and Approaches
1. Defines microteaching 2. Equips in teaching skills. 3. Prepares lesson plan for practicing micro-teaching. 4. Practices different skills and link practice. 5. Selects assessment mechanism.	5.1Micro-teaching - meaning, nature. and characteristics of microteaching cycle 5.2Steps in micro - teaching 5.3Micro-teaching skills: Probing Questions Stimulus variation Reinforcement Explanation Blackboard Writing Closure 5.4Link practice -concept and significance 5.5Teaching competency-subject competency, pedagogical competency, technological competency	• Lecture • Digital presentation • Discussions • Debates • QA session

ASSESSMENT

1. Brain storming
2. Demonstration
3. Discussion
4. Group work
5. Lesson plan preparation

SUGGESTED ACTIVITIES (Any two)

1. Prepare a digital album about the contribution of famous Historians in the development of history education.
2. Prepare an Year plan and Unit plan in History of any class.
3. List out various specific instructional objectives from any one unit of class VIII.
4. Present a topic based on any one techniques of instruction and prepare a report.
5. Examine historical films, documentaries, or novels to analyze their portrayal of historical events and characters.
6. Content analysis of Text Book of Standard VII and VIII.

📖PRESCRIBED READINGS

- Aggarwal, J.C. (2003). *Teaching of History: A Practical Approach.* Sterling Publications.
- Bhata, R.L. (2004). *Contemporary Teaching of History* (2nd ed.). Surjeet Publications.
- Ruhela, S.P. (2018). *Teaching of Social Science.*Neelkamal Publications.
- Kaur, JaskiranVir. (n.d.). *Teaching of History.*Tandon Publications.

- Kumar, S.P.K., &Nowshad, P.P. (2006). *Social Studies in the Classroom: Trends and Methods.*Calicut University : Scorpio Publishers,
- Kochhar, S.K. (2020). *Teaching of Social Studies.* Sterling Publishers.
- Mangal, S.K., &Mangal, Uma. (2023). *Pedagogy of Social Science.* PHI Learning Pvt. Ltd.
- Siddiqui, M.H. (2009). *Techniques of Classroom Teaching.* APH Publishing Corporation.
- Sivarajan, K., & Happy, P.V. (2022). *Methodology of Teaching Social Science.* Calicut University Co-operative Store.
- Srinivas, Murthi, Rao, I. Prasad, &Rao, DigumartiBhaskara. (2004). *Methods of Teaching History.* Discovery Publishing.
- Singh, Y.K. (2009). *Teaching of History: Modern Methods.* APH Publishing Corporation.

🕮SUGGESTED READINGS

- Anderson, W.L., &Krathwohl, D.R. (2001). *Taxonomy of Learning, Teaching and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives. Handbook.* Longman Green & Co.
- Bloom, B.S. (1956). *Taxonomy of Educational Objectives: Cognitive Domain.* David McKay Co.
- Bruner, Jerome S. (1971). *Towards a Theory of Instruction.* Harvard University Press.
- Clarck, L.H. (1974). *Teaching Social Studies in Secondary School* (2nd ed.). McMillan.
- Dash, B.N. (1998). *Content and Methods of Teaching Social Studies.* Kalian Publishers.
- Deve, Pushkin. (2009). *Methods and Techniques of Teaching.* Sterling Publishers.
- Edigar, M., &Rao, B. (2003). *Teaching Social Studies Successfully.* Discovery Publishing House.
- Finer. (1953). *Teaching Techniques in Social Science.* Bank Street Publishing.

Course Code:BED1PC004 *Pedagogic Course*

B.Ed. Degree Programme
Semester-I

THEORY AND PRACTICES IN MATHEMATICS EDUCATION

(4 Credits – 120 Hours)

Preface

It is a course designed to equip Prospective Teachers with a comprehensive understanding of the nature, goals methods of teaching mathematics. It delves into the theoretical underpinnings of mathematics education, exploring various pedagogical approaches and their implications for curriculum design and classroom practice. By examining the interplay between mathematics, society the individual, Prospective Teachers will develop a critical perspective on the role of mathematics in shaping knowledge, attitudes skills.

✍ COURSE OUTCOMES

On successful completion of the course, the Prospective Teacher

1. Explores the scope of teaching Mathematics
2. Analyses the contribution of various mathematicians
3. Examines the aims and objectives of teaching Mathematics
4. Classifies the instructional objectives based on revised Bloom's taxonomy
5. Prepares instructional plan for teaching Mathematics
6. Distinguishes year plan, unit plan and lesson plan
7. Selects the appropriate method of teaching Mathematics
8. Uses various techniques of teaching Mathematics
9. Designs micro lessons in Mathematics
10. Practices teaching skills

Unit-I: NATURE, SCOPE AND DEVELOPMENT OF MATHEMATICS EDUCATION (15 Hours)

Learning Outcomes	Content	Suggested Strategies and Approaches
1. Describes the nature of Mathematics 2. Explains the need of teaching Mathematics 3. Familiarizes the history of development of Mathematics 4. Infers the contributions of various Mathematicians	1.1 Meaning and nature of Mathematics 1.2 Need and significance of teaching Mathematics 1.3 Brief history of the development of Mathematics 1.4 Contributions of India to the development of Mathematical concepts with special reference to Vedic Mathematics 1.5 Contributions of great Mathematicians (Indian and western) - Aryabhatta,Brahmagupta,Bhaskaracharya SrinivasaRamanujan, Pythagoras Rene Descartes,Euclid,Euler 1.6 Importance of including Mathematics in the school curriculum	• Lecture • Electronic visual presentation • Seminar • Assignment • Group Discussion

Unit –II: AIMS AND OBJECTIVES OF TEACHING MATHEMATICS (15 Hours)

Learning Outcomes	Content	Suggested Strategies and Approaches
1. States the aims of teaching Mathematics 2. Differentiates between general instructional objectives and specific learning outcomes 3. Classifies the objectives based on Revised Bloom's Taxonomy	2.1 Values of teaching Mathematics 2.2 Aims of teaching Mathematics – Practical aim, Social aim, Disciplinary aim, Cultural aim 2.3 General Instructional objectives(GIOs) and Specific Instructional Objectives (SIOs) based on Bloom's Taxonomy 2.4 Bloom's Taxonomy (Revised)	• Lecture • Illustrations • Auto instruction • Digital presentation • Seminar • Discussions • Demonstration • QA session

Unit-III: PLANNING OF MATHEMATICS INSTRUCTION (10 Hours)

Learning Outcomes	Content	Suggested Strategies and Approaches
1 Substantiates the need, relevance and stages of planning instruction in Mathematics 2 Identifies the steps of lesson planning	3.1 Planning – Meaning and importance Year plan Need and relevance of year plan Development of year plan Unit plan Need and relevance of unit plan Development of unit plan 3.2 Lesson Plan - need and relevance Format of a lesson plan: Herbartian steps – motivation, presentation, application, recapitulation and assignment Preparation of lesson templates 3.3 Resource unit-definition,significance and preparation	• Lecture • Lesson plan preparation • Discussion • Individual work followed by group work

Unit-IV: METHODS AND TECHNIQUES OF TEACHING MATHEMATICS
(20 Hours)

Learning Outcomes	Content	Suggested Strategies and Approaches
1. Identifies the methods and techniques of teaching Mathematics 2. Explores the various techniques of teaching	4.1 Concept of methods and techniques 4.2 Methods of teaching: Inductive and Deductive methods Analytic and Synthetic methods Heuristic method Laboratory method Problem Solving method Project method Activity Based Learning (ABL) Active Learning Methodology (ALM) 4.3 Techniques of teaching: Supervised study Group discussion Brainstorming Seminar Panel discussion Symposium Brain storming Buzz session	• Lecture • Digital presentation • Seminar • Assignment • Discussions • Debates • QA session

Unit-V: TEACHING SKILLS AND COMPETENCIES (20 Hours)

Learning Outcomes	Content	Suggested Strategies and Approaches
1 Explains the concept of microteaching and microteaching cycles 2 Practices different teaching skills	6.1 Concept of teaching 6.2 Phases of teaching 6.3 Meaning, need and relevance of microteaching 6.4 Microteaching cycle 6.5 Developing the skills of Explanation Probing questions Stimulus variation Reinforcement Black board writing 6.6 Link practice 6.7 Teaching competencies-subject,technological and pedagogical	• Discussion • Team teaching • Demonstration • Video recording and screening

ASSESSMENT

1. Assignment
2. Lesson transcript
3. Observation of class
4. Seminar presentation
5. Tests
6. Video presentation followed by feedback

SUGGESTED ACTIVITIES (Any two)

1. Prepare a digital album on the biography of any one Mathematician.
2. Prepare a report on the values of teaching Mathematics.
3. Prepare a micro lesson on any topic in Mathematics in high school.
4. Develop a lesson plan based on Herbatian steps for any topic in Mathematics.
5. Develop a unit plan on any topic in Mathematics.
6. Content analysis of Text Book of Standard VII and VIII.

🕮PRESCRIBED READINGS

- Aggarwal, J.C. (2008). *Teaching of Mathematics.*Vikas Publishing House.
- Bisnoi, U. (2015). *Teaching of Mathematics.* R-Lal Book Depot.
- James, A. (2005). *Teaching of Mathematics.*Neelkamal Publications.
- James, A. (2006). *Techniques of Teaching of Mathematics.*Neelkamal Publications.
- Kumar, S., &Ratnalikar, D.N. (2003). *Teaching of Mathematics.*Anmol Publishing House.
- Kulshreshtha, A.K. (2008). *Teaching of Mathematics.*R.Lall Books Depot.
- Mustafa, M. (2005). *Teaching of Mathematics.* Deep and Deep Publications.

- Mangal, S.K. (2015). *Teaching of Mathematics.*Tandon Publications.
- Sidhu, K.S. (2014). *Teaching of Mathematics.* Sterling Publications.
- Soman, K., &Sivarajan, K. (2008). *Mathematics Education* (2nd ed.). Calicut University.

🕮SUGGESTED READINGS

- Anderson, L.W., &Krathwohl, D.R. (2001). *A Taxonomy for Learning, Teaching and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives.* Longman.
- Bhatia, K.K. (2001). *Foundations of Teaching Learning Process.*Tandon Publications.
- Mustafa, M. (2005). *Teaching of Mathematics.* Deep and Deep Publications.
- Pratap, N. (2008). *Teaching of Mathematics.* R. Lall Books Depot.
- Siddizui, M.H. (2005). *Teaching of Mathematics.* APH Publications.
- Rao, D.B., &Pushpalatha, D. (1995). *Achievement in Mathematics.* Discovery Publishing House.
- Siddiqui, M.H. (2007). *Teaching of Mathematics.* APH Publishing House.

Course Code:BED1PC005 *Pedagogic Course*

B.Ed. Degree Programme
Semester-I
THEORY AND PRACTICES IN PHYSICAL SCIENCE EDUCATION

(4 Credits - 120 Hours)

Preface

It is a core course designed to equip Prospective Teachers with a comprehensive understanding of the nature, purpose methods of teaching physical science. This course explores the theoretical foundations of physical science education, examining various pedagogical approaches and their implications for curriculum development and instruction. Through a combination of theoretical exploration, practical applications reflective practices, Prospective Teachers will develop the ability to design and implement engaging and effective physical science lessons that promote scientific understanding and inquiry.

✍ COURSE OUTCOMES

On the successful completion of the course, the Prospective Teacher

1. Analyses the scope and development in Physical Science Education
2. Appreciates the contributions of scientists
3. Elaborates the aims and objectives of teaching Physical Science
4. Compares different taxonomies
5. Classifies the instructional objectives based on revised Bloom's taxonomy
6. Prepares unit plan and lesson plan based on school content
7. Examines various methods and techniques of teaching Physical Science
8. Uses a variety of teaching strategies
9. Describes micro teaching cycle
10. Demonstrates teaching skills and competencies necessary for teaching Physical Science

Unit-I: NATURE, SCOPE AND DEVELOPMENT OF PHYSICAL SCIENCE EDUCATION (15 Hours)

Learning outcomes	Content	Suggested Strategies and Approaches
1 Describes the nature of Science 2 Traces the development of Science Education 3 Identifies the emerging branches of Science 4 Analyses the importance of Science as school subject 5 Appreciates the contributions of scientists	1.1 Nature of science Meaning of Science Definition of Science Science as a product and a process Development of Science in Ancient, Medieval and Modern period Emerging branches of Science Importance of Science in school curriculum 1.2 Contributions of Eminent Scientists - Indian and Abroad- Albert Einstein,SirIssac Newton Thomas Alva Edison,Dmitri Mandeley C.V.Raman, HomiJehangirBhabha, A.P.J.Abdulkalam	• Discussion • Digital presentation • Peer learning • Seminar • Debate • Talk by experts • Debates • Digital presentation

Unit- II: AIMS AND OBJECTIVES OF TEACHING PHYSICAL SCIENCE (15 Hours)

Learning Outcomes	Content	Suggested Strategies and Approaches
1. Identifiesthe values of teaching physical science 2. Differentiates general and specific instructional objective 3. Analyses Bloom's Taxonomy, Mc Cormack and Yager, Revised Blooms taxonomy and Technology Integrated Taxonomy 4. Summarises aims and objectives	2.1 Values of teaching Science- Intellectual, Utilitarian,Vocational, Cultural,Moral, Aesthetic 2.2 Aims and objectives meaning and definitionof teaching Physical science in school General and specific objectives of teaching Physical science 2.3 Bloom's Taxonomy of Educational Objectives Mc Cormack and Yager (1989) Taxonomy Revised Bloom's Taxonomy (2001) (Anderson &Krathwohl) 2.4 Recommendations of various commission on Science education KothariCommission(1964) NPE(1986) NEP 2020	• Digital presentation • Group discussion • Lecture

Unit-III: PLANNING OF INSTRUCTION IN PHYSICAL SCIENCE EDUCATION (15 Hours)

Learning Outcomes	Content	Suggested Strategies and Approaches
1. Differentiates among year plan, unit plan and lesson plan. 2. Writes lesson plan based on Herbartian steps 3. Compares unit plan and lesson plan	3.1 Planning- Meaning and Importance 3.2 Year plan-Need and relevance-Development of year plan 3.3 Unit plan - Definition Characteristics of a good unit plan,Steps in Unit plan Importance of unit plan 3.4 Lesson plan - Definition,Importance of planning a lesson Criteria of a good lesson plan Herbartian steps-Lesson template preparation Merits and demerits of lesson planning 3.5 Resource Unit- Definition and Preparation	• Lecture Method • Discussion • Group discussion • Workshop • Lesson planpreparation

Unit-IV: INSTRUCTIONAL METHODS, STRATEGIES AND TECHNIQUES IN TEACHING PHYSICAL SCIENCE (20 Hours)

Learning Outcomes	Content	Suggested Strategies and Approaches
1. Identifies the criteria for selecting methods of teaching 2. Compares various methods and techniques in teaching 3. Selects the most appropriate methods and techniques for teaching.	4.1 Methods and Techniques: Concept, Need and Characteristics Criteria for selection of a method 4.2 Teacher Centered Methods: Lecture Method Lecture cum Demonstration method Historical and Biographical method 4.3 Learner Centered Methods: Assignment method Scientific Method Heuristic method Project method Laboratory method Problem solving method Activity Based learning(ABL) Active Learning Methodology(ALM) 4.4 Techniques of Instruction: Seminar Panel Discussion Symposium Brain Storming Buzz session Role Play	• Seminar • Group discussion • Debate • Brain Storming • Participatory learning

Unit-V: TEACHING SKILLS AND COMPETENCIES IN PHYSICAL SCIENCE (15 Hours)

Learning outcomes	Content	Suggested Strategies and Approaches
1. Explains the need for microteaching 2. Identifies the components of various skills 3. Practices various microteaching skills	5.1 Microteaching- Origin, Definition, Characteristics-Phases- Microteaching cycle- Merits. 5.2 Teaching Skills- Probing question Reinforcement Stimulus variation Explaining Blackboard use Introduction Demonstration Link Practice 5.3 Teaching Competencies- Subject competencies, Pedagogical competencies, Technological competencies	• Demonstration • Observation • Practising skills

ASSESSMENT

1. Assignment
2. Lesson transcript
3. Observation
4. Seminar presentation
5. Tests
6. Video presentation followed by feedback

SUGGESTED ACTIVITIES (Any two)

1. Prepare a digital album about the contributions of scientists towards Physical Science.
2. Prepare a unit plan in Physical Science.
3. List out various specific instructional objectives from any one unit of standard VIII.
4. Present a topic based on any one techniques of instruction and prepare a report.
5. Explore the philosophy of Science and its implications for Science teaching.
6. Content analysis of Text Book of Standard VII and VIII.

🕮PRESCRIBED READINGS

- Radha, Mohan. (2023). *Teaching of Physical Science.* Neelkamal Publishers.
- Dr.Mariamma Mathew. (2023). *Instructional Strategies and Techniques in Science Education.* By the Author.
- Sharma, R.C. (2006). *Modern Science Teaching.*DhanpatRai Publications.
- Gupta, S.K. (1985). *Teaching of Physical Science in Secondary Schools.* Sterling Publication Pvt. Limited.
- Vanaja, M. (2010). *Educational Technology.*Neelkamal Publishers.
- Sivarajan, K., &Faziluddin, A. (2006). *Science Education.* Calicut University Central Co-operative Press.
- Rao, A. (1995). *Teaching of Physics*. Armed Publication.
- Ravikumar, B. K. (2000). *Teaching of Science*. Mangal Deep.
- Sundar, P. (2016). *Teaching of Chemistry*. KSK Publications.
- Tripathi, S. (n.d.). *Teaching of Physics*. Dominant Publishers.
- Venkat, N., &Ramulu, D. C. A. (2016). *Pedagogy of Physical Sciences*. Neelkamal Publications.
- Yadav, M. S. (2004). *Teaching Science at Higher Level*. Anmol Publications.

🕮SUGGESTED READINGS

- Bhatnagar, A., &Bhatnagar, B. (2014). *Teaching of Science*. Lall Book Depot.
- Ediger, M., &BhaskaraRao, D. (1996). *Science Curriculum*. Discovery Publishing.
- Ediger, M., &BhaskaraRao, D. (2011). *Essays on Teaching Science*. Discovery Publishing.
- Joshi, S. R. (2005). *Teaching of Science*. APH Publishing.
- Kaur, M. K. (2012). *Modern Approach to Teaching Science*. Tandon Publications.
- Kumar, A. (1995). *Teaching of Physical Sciences*. Anmol Publications.
- Lassard, J., & Dias, M. (2009). *The Art of Teaching Science*.
- Liveridge, M., Cochrane, B., Kerkot, J., & Thomas, J. (2010). *Teaching Science*. Sage Publications.
- Materanri, V. K., &Mateswari, V. (2010). *Teaching of Science*. VayuRakheja.
- Mohan, R. (2004). *Innovative Science Teaching*. Prentice-Hall of India Private.
- Nawale, D., &Garg, S. (2014). *Teaching Techniques in Science*. Books International.
- Nayak, A. (2019). *Teaching of Physics*. APH Publishing.
- Paddy, R. S. (1997). *Physics Education*. Commonwealth Publishers.
- Rajasekar, D. (2005). *Methods of Teaching Physical Science*. Neelkamal Publications.
- Rajasekar, D. (2008). *Methods of Teaching Physical Science*. Neelkamal Publications.
- Photon, J., & Shreve, P. (2017). *Teaching Science in the 21st Century*. Viva Books.

Course Code:BED1EPC01 *EPC*

B.Ed. Degree Programme
Semester-I

ENHANCING DIGITAL SKILLS
(2 Credits- 60 Hours)

✍ COURSE OUTCOMES

On successful completion of the course, the Prospective Teacher

1. Explains the concept of information and communication technology
2. Creates blog and post content related to education and field of action
3. Selects related content, prepare video and upload in you tube
4. Prepares grade sheet by using spread sheet
5. Identifies the web quest in their subject in school
6. Prepares slides for power point presentation
7. Creates online groups for sharing ideas and discussions
8. Discovers different teaching apps for teaching learning process

Unit I - Basic Computer Skills

Operating systems (Windows, macOS, Linux)
File management. Internet browsing, Email
Word processing (Microsoft Word, Google Docs)
Spreadsheets (Microsoft Excel, Google Sheets)
Presentations (Microsoft PowerPoint, Google Slides)

Unit II - Digital Literacy

Online safety and security
Digital etiquette
Information literacy
Critical thinking and evaluation of digital content

Unit III - Digital Tools and Applications

Digital Storytelling
Social media platforms
Online learning platforms
Productivity apps
Design and multimedia tools, AI tools

Assessment

- Pre- and Post-Assessment
- Performance-Based Assessment
- Portfolio Assessment
- Self-Assessment

Activities (Any five)

1. Hands on practice in using computer, laptop, projector, interactive white board, printer.
2. Create educational blogs for individual/ group students for strengthening sharing and learning.
3. Shoot a video on any lesson and upload inyoutube.
4. Develop a grade sheet using spread sheet.
5. Identify and use a web quest in any of the school subject.
6. Presentation on any unit using PowerPoint.
7. Embed the learning materials and educational videos created by the student teachers in their respective blog.
8. Create online groups (Google Groups) and share ideas/discussion.
9. Use platforms like Google meet, Google classroom, Zoom etc. to conduct online classes.
10. Identify few teaching apps and make a report on them with screenshots and descriptions.

Course Code:BED1EPC02 *EPC*

B.Ed. Degree Programme
Semester-I
DRAMA AND ARTS IN EDUCATION
(2 Credits- 60 Hours)

✍ COURSE OUTCOMES

On successful completion of the course, the Prospective teacher

1. Analyses the preparation and presentation techniques for effective classroom technique
2. Organizes music, dance, theatre and puppetry shows for school children
3. Examines the relevance of dramatics and visual arts in pedagogic strategies
4. Selects suitable themes of art for stage show performance
5. Writes scripts related to themes from the content area of optional courses
6. Prepares lesson plans using dramatization technique on the respective optional subjects

Unit I - Fundamentals of Drama

Drama as a tool of learning, different forms of drama-Role play and Simulation, Drama techniques - voice and speech, mime and movements, improvisation, skills of observation, imitation and presentation

Unit II - Visual Arts

Drawing and painting - Colours, strokes and sketching, drawing and painting in learning process- Chart making, poster making, clay modeling, collage making

Unit III - Performing Arts

Dance-Various forms of dance,\
Music- Writing and practising rhymes and action songs
Puppetry –preparation of different types of puppets
Integrating Music, Dance, Theatre and Puppetry in teaching –learning process
Arts Education as a pedagogical tool

Assessment

- Performance-based assessment
- Project-based assessments
- Portfolio assessment
- Rubrics

Activities(Any five)

1. Preparation and presentation techniques for effective classroom learning by developing aids.
2. Listening/viewing and organizing regional music, dance, theatre and puppetry.
3. Presentation and participation in any one of the traditional art forms of Tamil Nadu.
4. Participation in workshop on Dramatics and Visual Arts and present a detailed report.
5. Visit to art galleries/art exhibitions and cultural festivals.
6. Select themes and stage them as skits/dramas/street plays.
7. Writing scripts related to themes from optional course content area.
8. Prepare an Album on visual arts and crafts.
9. Practicing and composing songs to teach subject matter concerned.
10. Preparation of four lesson transcripts (two each in phaseI and phaseII).