

MANGALORE UNIVERSITY**TWO YEAR B Ed.: SYLLABUS FOR I SEMESTER****BEd.**

- 1.1 Childhood and Adolescence
- 1.2 Philosophical and Sociological Bases of Education
- 1.3 Educational Technology
- 1.4 Understanding Discipline and Pedagogy
 - 1.4.1 Languages
 - 1.4.2 Social Science
 - 1.4.3 Science
 - 1.4.4 Mathematics
 - 1.4.5 Commerce
- 1.4.6 Understanding Disciplines and School Subjects
- 1.5 ICT – Basic Competencies
- 1.6 Language Across the Curriculum
- 1.7 Psycho-social Tools and Techniques
- 1.8 Simulation and Micro Teaching

Credits, Marks and Passing Standards:

The details credits, marks and passing standards shall be as given in the state syllabus page.no. 23.

1.1 CHILDHOOD AND ADOLESCENCE

Hours: 60

Marks: 100

Credits: 4

OBJECTIVES

After studying this course the student- teachers will be able to

1. Explain the process of development with special focus on infancy, childhood and adolescence
2. Critically analyze developmental variations among children
3. Comprehend adolescence as a period of transition and threshold of adulthood
4. Analyze different factors influencing child development

UNIT 1: UNDERSTANDING HUMAN DEVELOPMENT

10 hrs.

- 1.1 Human development: Concept, principles of development, scope and its importance for the classroom teacher
- 1.2 Different stages of human development: Prenatal, infancy, childhood , adolescence and adulthood
- 1.3 Nature Vs Nurture: Factors affecting Development
- 1.4 Domains: Physical, Sensory-perceptual, cognitive, socio-emotional, language and communication, social relationship.

UNIT 2: THEORETICAL APPROACHES TO DEVELOPMENT

15 hrs.

Developmental Theories: Meaning, Principles, salient features and classroom implications of the following:

- 2.1 Cognitive & Social- cognitive theories (Piaget, Vygotsky, Bruner, Bandura)
- 2.2 Psychosocial Theory (Erikson)
- 2.3 Psychoanalytic Theory (Freud)
- 2.4 Ecological Theory (Bronfrenbrenner)
- 2.5 Holistic Theory of Development (Steiner)

UNIT 3: THE CHILDHOOD YEARS (BIRTH to EIGHT YEARS)

15 hrs.

- 3.1: Prenatal Development: Concept, stages and influence on prenatal development
- 3.2: Birth and Neonatal Development: Concept, screening the newborn- APGAR score, reflexes and responses, Euro-perceptual development

3.3: Milestones and variations in development: Physical, social and emotional, intellectual and language

3.3: Environmental factors influencing early childhood development: Home factors, School factors and Social factors

3.4: Role of play in enhancing development: Physical, intellectual, emotional and social

UNIT4: TRANSITION: ADOLESCENCE AND ADULTHOOD

A: EARLY ADOLESCENCE (NINE YEARS to EIGHTEEN YEARS) 10 hrs.

4.1: Emerging Capabilities: Physical, Social and Emotional Domains

4.2: Emerging Cognitive Capabilities: Meta-Cognition, Creativity and Ethics

4.3: Issues related to Puberty

4.4: Influence of the Environment (Social, Cultural, Political) on the Growing child

B: ADULTHOOD 10 hrs.

4.5: Formation of Identity and Self Concept: Concept and Need

4.6: Emerging Roles and Responsibilities: Self and Community

4.7: Life Skills and Independent Living: 10 life skills given by UNICEF

4.8: Career Choices: Holland's Theory

Suggested Activities

- Preparing a report on adolescent problems
- Preparing a report on various career choices
- Observing and preparing a report by identifying milestones achieved at various stages of development
- Writing a Journal for reflection

Note: The College is free to introduce any other relevant and useful activity related to the subject.

ASSESSMENT

2 Tests (5+5)	10	20
Practicum (Assignment)	10	
External examination	80	80
Total		100

Suggested Readings

1. Berk, L. E. (2000). Human Development. Tata Mc.Graw Hill Company, New York.
2. Brisbane, E. H. (2004). The developing child. Mc.Graw Hill, USA.
3. Cobb, N. J. (2001). The child infants, children and adolescents. Mayfield Publishing Company, California.
4. Hurlock, E. B. (2005). Child growth and Development. Tata Mc.Graw Hill Publishing Company, New York.
5. Hurlock, E. B. (2006). Developmental Psychology- A life span approach. Tata Mc.Graw Hill Publishing Company, New Delhi.
6. Meece, J. S., & Eccles J. L (Eds) (2010). Handbook of Research on Schools, Schooling and Human Development. New York: Routledge.
7. Mittal, S. (2006). Child development- Experimental Psychology. Isha Books, Delhi.
8. Nisha, M. (2006). Introduction to child development, Isha Books, Delhi.
9. Papalia, D. E., & Olds, S. W. (2005). Human development. Tata Mc.Graw Hill Publishing Company, New York.
10. Santrock, J. W. (2006). Child Development., Tata Mc.Graw Hill Publishing Company, New York.

1.2 PHILOSOPHICAL AND SOCIOLOGICAL BASES OF EDUCATION**HOURS: 60****MARKS:100****CREDITS: 4****OBJECTIVES**

1. To develop understanding about the relationship between Philosophy and Education.
2. To develop understanding about the relationship between Sociology and Education.
3. To develop understanding about the basic Principles of Eastern and Western Educational Philosophy.
4. To realize the needs and implication of Values in Education.

UNIT 1: PHILOSOPHICAL FOUNDATION OF EDUCATION (15 HOURS)

- 1.1: Meaning and various definitions of education.
- 1.2: Meaning and scope of philosophy.
- 1.3: Need of philosophy in life and teaching.
- 1.4: Interrelationship between philosophy and education.

UNIT 2: SCHOOLS OF PHILOSOPHY (20 HOURS)

- 2.1. Idealism, Naturalism, Pragmatism: aims and objectives, curriculum, methodology, teacher-pupil, Relationship, discipline and educational Implications of these schools.
- 2.2. Contribution of Philosophers: M.K.Gandhi, Rabindranath Tagore, John Dewey and Rousseau
- 2.3. Values-meaning, types of values: spiritual, moral, social, aesthetic, human values
- 2.4. National values as mentioned in the Indian Constitution

UNIT 3: SOCIOLOGICAL BASES OF EDUCATION (15 HOURS)

- 3.1. Relationship between Sociology and Education.
- 3.2. Concept, scope and functions of Educational Sociology.
- 3.3. Impact of Education in developing social harmony.
- 3.4: Culture: meaning, definitions, characteristics role of education in promoting culture, Cultural Lag and Cultural Relativism.
- 3.5: Social Change and Social stratification: meaning, role of education in promoting social change.

UNIT 4: STATE AND EDUCATION (10 HOURS)

- 4.1: Education for All and provisions in Indian Constitution.
- 4.2: Education for Emotional and National Integration.
- 4.3: Education for International Understanding-meaning and need.
- 4.4: Education in relation to modernization,

Suggested Activities

1. Conducting and reporting any one activity which promotes National Integration.
2. Participating in any social activity conducted by International Organizations like UNICEF, WHO and reporting.
3. Conducting the awareness programmes about the constitutional provisions regarding education and reporting.
4. Other activity: survey/analytic study related to the syllabus can be planned implemented by the college.

Note: The College is free to introduce any other relevant and useful activity related to the subject.

ASSESSMENT

2 Tests (5+5)	10	20
Practicum (Assignment)	10	
External examination	80	80
Total		100

Suggested Readings

- 1 Sociological Approach In Indian Education by SS Mathur – Vinod Putak
Mandira Agra
- 2 The Philosophical And Sociological Foundations Of Education (Doaba House
Book Sellers And Publication Delhi 11006) by Kamal Bhatia And Baldevbhatia
- 3 Ground Work Of Theory Of Education by Ross
- 4 Modern Philosophy Of Education – by Brabacher
- 5 Foundations of Education – VP Bokil
- 6 Educational Sociology – Brown
- 7 Deschooling Society – Evan Illich

1.3 EDUCATIONAL TECHNOLOGY

CONTACT HOURS: 60

MARKS: 100

CREDITS: 4

OBJECTIVES

After the completion of course, pupil teachers will be able to

1. Understand the concept and scope of Educational Technology
2. Understand the concept of Approaches of Educational Technology
3. Explain the meaning and use of cybernetics
4. Understand the use of different Media in Education
5. Understand the different learning Experiences and use them in the teaching-learning process
6. Acquaint with innovations in Educational Technology
7. Integrate ICT into teaching learning, administration and evaluation
8. Develop information management, communication and collaborative skills
9. Design and develop and use learning materials in teaching
10. Practice safe, ethical ways of using ICT
11. Use ICT for making classroom processes inclusive

UNIT I: BASICS OF EDUCATION TECHNOLOGY

12 HOURS

- 1.1 Education Technology – Meaning, Nature, Scope, Objectives and Importance
- 1.2 Instructional technology and teaching technology: Meaning, nature and scope
- 1.3 Approaches of Educational Technology- Hardware, software and systems approach- concept, scope and educational implications
- 1.4 Cybernetics: Meaning and use in the development of instructional design

UNIT II: MEDIA IN EDUCATION

12 HOURS

- 2.1 Print Media – Books, Journals, Magazines and news paper- concepts and educational implications
- 2.2 Digital Media – Documentaries, Still pictures, websites, web page – concept, procedure of development, Uses, merits and limitations
- 2.3 A-V Aids – types: audio aids, Video aids and A-V Aids (Radio, TV, and films) – meaning, needs, functions, application in Education
- 2.4 Multi-Media: Meaning, features of computer multi-media, stages of development of multi-media instructional package, scope and educational implications; Multi sensory approaches – relationship of Learning and Experiences, Dales cone of experience and step learning experience model

UNIT III: EDUCATIONAL SYSTEMS**18 HOURS**

- 3.1 E-learning, , Web – based learning, mobile learning , blended learning – concept, advantages and limitations
- 3.2 Teleconferencing: Audio and Video, Interactive white board – uses and advantage
- 3.3 Web services: e-mail, chat, online forums, blog, Wiki, e-library: educational implications
- 3.4 Resource centers and services in educational technology: CIET(Central Institution of Educational Technology) , SIET,(State Institution of Educational Technology) EMMRC,(Educational MultiMedia Research Centre) UGC-CEC(University Grants Commission – Consortium for Educational Communication), TEINDIA(Teacher Education INDIA), KOER(Karnataka Open Educational Resource), NROER(National Repository Open Educational Resource), EDUSAT(Educational Satellite), NME-ICT(National Mission in Education through Information Communication Technology), NPTEL(National Programme on Technology Enhanced Learning), IT@SCHOOL(Information Technology at School), GYAN DARSHAN, INFLIBNET(Information and Library Network): uses and advantages

UNIT IV: UNDERSTANDING OF ICT IN EDUCATION**18 HOURS**

- 4.1 Concept of ICT and principles of using ICT in teaching learning process
- 4.2 Computer Assisted Instruction (CAI), Computer Managed Instruction (CMI), Computer Mediated Communication (CMC), Computer Simulation, Educational podcast cloud computing- Concept, meaning and merits in education:
- 4.3 Impact of ICT in education- social, cultural, economical; Issues and concerns related to ICT
- 4.4 Role of teacher in ICT enabled education (administrator, facilitator, tutor, mentor, counsellor, evaluator)

Suggested Activities

1. Browse websites (Khan Academy, E-Gyankosh, Shodhaganga, NCTE, NCERT, DSERT, UGC) collect documents like policies, plans, statistics, scholarships, issues and trends and write a report.
2. Use of Open Education Resources(OER) for class room transaction
3. Recording – Audio/Video lectures followed by discussions, presentations, and writing report.
4. Developing web resource file for any given topic(unit)
5. Mobile learning – related activities like use of blue tooth, SMS, MMs, and other features.
6. Login in to you tube – download and upload
7. Writing a report on TV lessons and discussions
8. Writing a report on radio lessons and discussions

Note: The college is free to introduce any other relevant and useful activity related to the subject.

Suggested Readings

- Apter, Michael, J. (1968). *The New Technology of Education*. London: MacMillan.
- Bhatt, B.D. and Sharma, S.R. (2003). *Educational Technology: Concept and Techniques*. New Delhi: Kanikshka Publishers Distributors.
- Bhushan, Anand and Ahuja, M. (1992). *Educational Technology*. Patiala: Bawa Publishers.
- Dale Edgar. (1954). *Audio-visual methods in Teaching*. (2nd ed). New York: The Dryden Press
- Dale, Edgar.(1946). *Audio-visual methods in Teaching*. New York: The Dryden Press.
- Dale Edgar. (1969). *Audio-visual methods in Teaching*. (3rd ed). New York: The Dryden Press.
- Dange. Jagannath, K.(2014). *Learning and Experiences*. Lap Lambert Publication. Germany.
- Goel, D. R., and Joshi, P. (1999). *A Manual for INTERNET Awareness*. CASE: The M. S. University of Baroda Press.
- Khirwadkar, A. (2005). *Information & Communication Technology in Education*. New Delhi: Sarup & Sons.
- Khirwadkar, A. (2010). *e-learning Methodology: Perspectives on the Instructional Design for Virtual Classrooms*. New Delhi: Sarup Book Publication Ltd.
- Kulkarni, S.S. (1986). *Introduction to Education Technology*. New Delhi: Oxford & IBH Publishing Co.
- Kumar, K.L. (1996). *Educational Technology and Communication Media*. Cuttack: Nalanda.
- Mahapatra, B.C. (2006). *Education in Cybernetic Age*. New Delhi: Sarup Sons.
- Mangal, S.K. and Mangal, U. (2009). *Essentials of Educational Technology*. New Delhi: PHI Learning Private Limited.
- Richmond, W. R. (Ed.) (1900). *The Concept of Education Technology: A Dialogue with Yourself*. London: Weidenfield and Nicolson.
- Ruhela, S.P. (1973). *Educational Technology*. New Delhi: Raj Prakashsn.
- Sampath, K., Pannirselvam, A.and Santhanam, S. (1990). *Introduction to Educational Technology*. New Delhi: Sterling Publishers Private Limited.
- Saxena, S. (1999). *A first course in computers*. New Delhi: Vikas Publishing House.
- Sharma, R. A.(). *Technology of Teaching*. Meerut: International Publishing House.

1.4 UNDERSTANDING DISCIPLINE AND PEDAGOGY

1.4.1 LANGUAGES

Contact Hours: 30

Marks: 50

2 Credits

OBJECTIVES

- To develop an understanding of nature and functions of a language
- To help student teachers critically analyse the language policy and politics and their implications for teaching the language
- To help student teachers develop insights into the processes of transition from home tongue to school language and their implications for learning languages in school
- To help student teachers differentiate between language learning and acquisition
- To facilitate a critical examination of the language curriculum of secondary schools
- To enable student teachers to understand how classroom environment influences language learning

UNIT 1: GENERAL INTRODUCTION ON LANGUAGE

What is Language? Various components of language; Functions of language; How different are different languages? Critical analysis of the following terms: Dialect, Standard and Non-standard language, classical; Characterizing mother tongue, first language, and second language, bilingual and multi-linguals.

UNIT 2: LANGUAGE POLICIES AND POLITICS

Power, identity, and politics of language; Language as a medium of instruction and debates about English/Kannada as a medium of instruction; the recommendations of NCF-2005 on language education

Status of Kannada in administration and society. Recommendations of Gokak Committee, present language policy of the state.

UNIT 3: LANGUAGE AND LITERACY IN THE CONTEXT OF SCHOOL

Language environment of school and the varied nature of Indian classrooms;

Language Learner's profile: language environment at home; Characterizing bilingualism and multilingualism; Notions about interference or bridge;

School's Expectations: Views relating to child's home language and literacy practices;

What is viewed as "right" and "wrong" language in schools and the underlying assumptions; critically understanding "errors" and the insights they provide.

UNIT 4: LANGUAGE ACQUISITION

Language learning in early childhood; Language and Cognition: Piaget, Vygotsky, And Chomsky on language acquisition and relevance of their views for the language teacher; Second language acquisition

UNIT 5: LANGUAGE PROCESSES AND THE CLASSROOM CONTEXT

Oral language in the classrooms; Participation in the classroom; Facilitating language interaction and independence. Creating secure classroom environment for language use; Space for “risk taking”; Reading: Engaging with books of different Types; Comprehension of stories and non-fiction (content area texts); Response to literature: Aesthetic and emotive aspect of reading; writing as a composing process: Problem solving, developing a sense of audience, purpose, and understanding the process of writing.

UNIT 6: EXAMINING THE LANGUAGE CURRICULUM

Syllabus of different languages; Review of textbooks, use of literature in language textbooks, critical analysis of exercises and; Moving beyond the textbook: Children’s literature for different age groups; Classroom practices in India

UNIT 7: CHALLENGES IN LANGUAGE LEARNING

Issues of non-comprehension; lack of independence in language use; Examining the role of school context in creating difficulties for language learners ;Understanding language “disability” and the language teacher’s role in dealing with it.

Suggested Activities

1. Compare two languages in terms of their characteristic features
2. Prepare an essay developing insights into the politics behind the issue of medium of instruction in Karnataka. Support your discussion with relevant reports and articles
3. Interview 10 students on the difference between their home tongue and the school language and how they are able to cope with the school language. Now prepare a report on transition from home tongue to school language with a focus on the problems children face in this process.
4. List and analyse in detail FIVE incidents in your school life that have contributed to you language growth.
5. Analyse and prepare a report on one language textbook prepared in Karnataka
6. Visit a school and analyse to what extent the school environment is conducive to language learning. Justify your answer with examples from school practices.

Note: The college is free to introduce any other relevant and useful activity related to the subject.

1.4.1 ಶಿಕ್ಷಣ ಶಾಸ್ತ್ರ ಹಾಗೂ ಬೋಧನ ವಿಷಯವಾಗಿ ಭಾಷೆ

ಘಟಕ : 1 ಭಾಷೆ- ಪ್ರಸ್ತಾವನೆ

1. ಭಾಷೆ ಎಂದರೇನು ? 'ಭಾಷೆ' ಯ ಅರ್ಥ ವ್ಯಾಖ್ಯೆ , ಮತ್ತು ಸ್ವರೂಪ
2. ಭಾಷೆಯ ಘಟಕಗಳು ಹಾಗೂ ಭಾಷೆಯ ಕಾರ್ಯಗಳು
3. ವಿಭಿನ್ನ ಭಾಷೆಗಳ ನಡುವಣ ಭಿನ್ನತೆಗಳು. (ಇಂಗ್ಲೀಷ್, ಹಿಂದಿ ಹಾಗೂ ದ್ರಾವಿಡ ಭಾಷೆಗಳು).
4. ಪ್ರಾಂತ್ಯ ಭಾಷೆ , ಪ್ರಮಾಣಿತ ಭಾಷೆ (ಗ್ರಾಂಥಿಕ ಭಾಷೆ), ಆಡು ಭಾಷೆ ಹಾಗೂ ಶಾಸ್ತ್ರೀಯ ಭಾಷೆಗಳು
5. ಮಾತೃಭಾಷೆಯ ಲಕ್ಷಣಗಳು.
6. ಪ್ರಥಮ ಭಾಷೆ, ದ್ವಿತೀಯ ಭಾಷೆ, ದ್ವಿ- ಭಾಷಾ ಸೂತ್ರ ಹಾಗೂ ತ್ರಿ-ಭಾಷಾ ಸೂತ್ರ

ಘಟಕ 2 ಭಾಷಾ ನೀತಿ ಮತ್ತು ರಾಜಕೀಯ

1. ಆಡಳಿತದಲ್ಲಿ ಕನ್ನಡದ ಸ್ಥಾನಮಾನ
2. ಸಮಾಜದಲ್ಲಿ ಕನ್ನಡದ ಸ್ಥಾನಮಾನ
3. ಭಾಷಾ ರಾಜಕೀಯ : ಗೋಕಾಕ ವರದಿಯ ಶಿಫಾರಸ್ಸುಗಳು ಹಾಗೂ ರಾಜ್ಯದ ಪ್ರಸ್ತುತ ಭಾಷಾ ನೀತಿ
4. ಬೋಧನಾ ಮಾಧ್ಯಮವಾಗಿ ಕನ್ನಡ ಮತ್ತು ಇಂಗ್ಲೀಷ್- ಚರ್ಚೆ
5. ರಾಷ್ಟ್ರೀಯ ಪಠ್ಯಕ್ರಮ ಚೌಕಟ್ಟು 2005 ರಲ್ಲಿ ಭಾಷಾ ಶಿಕ್ಷಣ

ಘಟಕ 3 ಶಾಲಾ ಸನ್ನಿವೇಷದಲ್ಲಿ ಭಾಷೆ ಹಾಗೂ ಸಾಕ್ಷರತೆ

1. ಶಾಲೆಯಲ್ಲಿ ಭಾಷಾ ಪರಿಸರ ಹಾಗೂ ವಿಭಿನ್ನ ಭಾಷಾ ಹಿನ್ನೆಲೆಯಲ್ಲಿ ವರ್ಗ ಕೊಠಡಿಗಳ ಸ್ವರೂಪ
2. ಭಾಷಾ ಕಲಿಕಾದಾರನ ಲಕ್ಷಣಗಳು
3. ಮನೆಯಲ್ಲಿನ ಭಾಷಾ ಪರಿಸರ
4. ದ್ವಿಭಾಷಾ ವಾದ ತ್ರಿಭಾಷಾ ವಾದ ಹಾಗೂ ಬಹುಭಾಷಾ ವಾದಗಳ ಲಕ್ಷಣಗಳು
5. ಮಾಧ್ಯಮಿಕ ಹಾಗೂ ಪ್ರೌಢಶಾಲಾ ಹಂತದಲ್ಲಿ ಪ್ರಥಮ, ದ್ವಿತೀಯ ಹಾಗೂ ತೃತೀಯ ಭಾಷೆಯಾಗಿ ಕನ್ನಡದ ಸ್ಥಾನ.
6. ಮಗುವಿನ ಮನೆ ಭಾಷೆ ಮತ್ತು ಸಾಕ್ಷರತೆಯ ಪರಿಕಲ್ಪನೆ ಹಾಗೂ ಭಾಷೆಗೆ ಸಂಬಂಧಿಸಿದಂತೆ ಶಾಲೆಯ ನಿರೀಕ್ಷೆಗಳು.
7. ಬಾಷಾ ದೋಷಗಳು - ವಿಶ್ಲೇಷಣೆ ಮತ್ತು ಒಳನೋಟ

ಘಟಕ 4 ಭಾಷಾ ಕಲಿಕೆ

1. ಬಾಲ್ಯಾವಸ್ಥೆಯಲ್ಲಿ ಭಾಷಾ ಕಲಿಕೆ;
2. ಭಾಷೆ ಮತ್ತು ಜ್ಞಾನ : ಪಿಯಾಜೆ, ವೈಗೋಟ್ಸ್ಕಿ ಹಾಗೂ ಚಾಮ್ಸ್ಕಿ ಅವರ ಪ್ರಕಾರ ಭಾಷಾ ಕಲಿಕೆ ಹಾಗೂ ಭಾಷಾ ಶಿಕ್ಷಕ ಮತ್ತು ದ್ವಿತೀಯ ಭಾಷಾ ಕಲಿಕೆ

ಘಟಕ 5. ತರಗತಿ ಸನ್ನಿವೇಶ ಹಾಗೂ ಭಾಷಾ ಪ್ರಕ್ರಿಯೆಗಳು

1. ತರಗತಿಗಳಲ್ಲಿ ಮೌಖಿಕ ಭಾಷೆ ;
2. ತರಗತಿಯಲ್ಲಿ ಭಾಗವಹಿಸುವಿಕೆ, ಸ್ವತಂತ್ರವಾಗಿ ಭಾಷಾ ಸಂವಹನದ ಅವಕಾಶ ಭಾಷಾ ಬಳಕೆಗೆ ತರಗತಿಯಲ್ಲಿ ಸುರಕ್ಷಿತವಾದ ವಾತಾವರಣ ಕಲ್ಪಿಸುವುದು.

3. ಓದುವಿಕೆಗೆ ಅವಕಾಶ ಕಲ್ಪಿಸುವುದು. ವಿವಿಧ ಬಗೆಯ ಪುಸ್ತಕ/ಪಠ್ಯಗಳ ಬಳಕೆ (ವಿಮರ್ಶೆ, ಕಥೆ, ಹಗೂ ಇತರ ಸಾಹಿತ್ಯ ಪ್ರಕಾರಗಳು)
4. ಕಥೆ ಹಾಗೂ ಪೂರಕ ಸಾಹಿತ್ಯಗಳನ್ನು ಪರಿಶೀಲಿಸಿ, ಅರ್ಥೈಸುವಿಕೆ ,
5. ಓದುವಿಕೆಯಲ್ಲಿ ರಸಾಸ್ವಾದನೆ (ಭಾವನಾತ್ಮಕ ಓದು)
6. ರಚನಾ ಕೌಶಲವಾಗಿ ಬರವಣಿಗೆ (ಕಥೆ, ಕವನ, ಪ್ರಬಂಧ ರಚನೆ)
7. ಭಾಷಾ ವಿವೇಚನೆಯ ಹಿನ್ನೆಲೆಯಲ್ಲಿ ಸಮಸ್ಯಾ ಪರಿಹಾರ
8. ಬರವಣಿಗೆಯ ಉದ್ದೇಶಗಳು ಹಾಗೂ ಅರ್ಥೈಸುವಿಕೆ
9. ಆಲಿಸುವಿಕೆಯನ್ನು ಬೆಳೆಸುವ ಕ್ರಮಗಳು

ಘಟಕ 6. ಭಾಷಾ ಪಠ್ಯಕ್ರಮದ ಪರಿಶೀಲನೆ

1. ಕನ್ನಡ ಭಾಷೆಯ ಪಠ್ಯವಸ್ತು (ಛಿಟಟಣಾಭಿಣ)
2. ಕನ್ನಡ ಭಾಷಾ ಪಠ್ಯಪುಸ್ತಕ ವಿಶ್ಲೇಷಣೆ
3. ಭಾಷಾ ಪಠ್ಯಪುಸ್ತಕಗಳಲ್ಲಿ ಸಾಹಿತ್ಯದ ಬಳಕೆ
4. ಭಾಷಾಭ್ಯಾಸಗಳ ವಿಮರ್ಶಾತ್ಮಕ ವಿಶ್ಲೇಷಣೆ
5. ಪಠ್ಯಪುಸ್ತಕಗಳಿಂದ ಹೊರತಾದ ಭಾಷಾ ಕಲಿಕೆ
6. ತರಗತಿ ಹಾಗೂ ವಯೋಮಾನಕ್ಕೆ ಅನುಗುಣವಾಗಿ ಮಕ್ಕಳ ಸಾಹಿತ್ಯದ ಬಳಕೆ

ಘಟಕ 7. ಭಾಷಾ ಕಲಿಕೆಯ ಸವಾಲುಗಳು

1. ಅರ್ಥಗ್ರಹಣದ ಸಮಸ್ಯೆಗಳು
2. ಭಾಷಾ ಬಳಕೆಯಲ್ಲಿ ಸ್ವಾತಂತ್ರ್ಯದ ಕೊರತೆ
3. ಭಾಷಾ ಕಲಿಕಾದಾರರು ಎದುರಿಸುವ ಅಡೆತಡೆಗಳು/ ಸಮಸ್ಯೆಗಳು : ಶಾಲಾ ಸನ್ನಿವೇಶದ ಪಾತ್ರದ ಪರಿಶೀಲನೆ
4. ಭಾಷಾ ತೊಡಕುಗಳನ್ನು ಅರ್ಥೈಸಿಕೊಳ್ಳುವುದು ಹಾಗೂ ಭಾಷಾ ತೊಡಕುಗಳನ್ನು ನಿವಾರಿಸುವಲ್ಲಿ ಭಾಷಾ ಶಿಕ್ಷಕರ ಪಾತ್ರ

1.4.2 SOCIAL SCIENCE

Contact Hours: 30

Max marks: 50

Credits: 2

OBJECTIVES

After the completion of course, pupil teachers will be able to –

- Understand the nature and philosophy of Social Science.
- Understanding of contemporary society and the relevance in teaching of social science in schools.
- Understand the status of social science at secondary school level.
- Understand the issues and challenges in articulating the nature of social science curriculum and its pedagogical practices.
- Evaluate and assess the teaching and learning processes and its valuable implications in the professional development of teachers.

UNIT I: MEANING AND ELEMENTS OF SOCIAL SCIENCE:

(10 HOURS)

- 1.1 History and Geography- Meaning, Nature, Time Sense and Space Sense Elements.
- 1.2 Political Science and Economics – Meaning, Nature and their importance in School Curriculum
- 1.3 Concept of Social Science and Social Studies.
- 1.4 Social Teacher: Qualities, Competencies and Role in Society

UNIT II SOCIAL SCIENCE IN SCHOOLS:

(10 HOURS)

- 2.1 Challenges in the development of Social Science Curriculum.
- 2.2 General Approaches in the construction of social science curriculum: Thematic Organization: Interdisciplinary, Multi Disciplinary
- 2.3 Cross Cultural perspectives and issues in social science.
- 2.4 Teaching of Social science: Problem Solving, Discussion, Project and Comparative Approaches.

UNIT III PEDAGOGICAL PRACTICES IN SOCIAL SCIENCE CURRICULUM (10 HOURS)

- 3.1** Review of different Commissions/Committee Reports:
- 3.2** National Curriculum Frameworks: 1975, 1988, 2000 and 2005.
- 3.3** Critical Review of Social Science Text books: Class Six to Class Ten.
- 3.4** Concerns in Teaching Social Science: Diversity, Gender and Special Needs.

Suggested Activities

- Collaborative projects on selected cross curricular areas taken from school syllabus: written assignments on issues, seminar presentation, action research with peers' involvement.
- Establishment and Enrichment of Social Science Resource Centre
- Enrichment of the subject areas like geography, history, political and social life and economics.
- Engagement with curriculum policies/documents and curriculum frameworks.
- Critical appraisal of existing social science curriculum and text book at school level
- Development of Unit / Thematic Plan.
- Organizing field trips as learning experience.
- Collection and Maintenance of relevant instructional resources.

Note: The College is free to introduce any other relevant and useful activity related to the subject.

Suggested Readings:

- Arora & Awasthy (2003), Political theory, Haranand Publication Pvt. Ltd. New Delhi.
- Arora, P (2014). Exploring the Science of Society. Journal of Indian Education. NCERT, New Delhi.
- Arora, P (2014). A Democratic Classroom for Social Science, Project Report, University of Delhi, Delhi.
- Batra, P. (Ed 2010). Social Science Learning in Schools: Perspective and Challenges. Sage Publications India Pvt. Ltd. New Delhi.
- Bining, A.C. & Bining, D.H. (1952), Teaching of social studies in secondary schools, Tata McGraw Hill Publishing Co. Ltd. Bombay.
- Crotty, M., (1998), The foundations of social research: Meaning and perspective in the research process, London: Sage Publication.

- Edgar, B.W. & Stanely (1958), Teaching social studies in high school, Heath and company, Boston D.C.
- Gallanvan & Kottler, Ellen (2008), Secrets to success for social studies teachers, Crowin Press, Sage Publication, Thousand Oaks, CA 91320.
- George, A., M. & Madan, A. (2009). Teaching Social Science in Schools. Sage Publications India Pvt. Ltd. New Delhi.
- Hamm, B. (1992). Europe – A Challenge to the Social Sciences. International Social Science Journal (vol. 44).
- Haralambos, M. (1980). Sociology Themes and Perspectives. New York. O.U.P.
- Haydn Terry, Arthur James and Hunt Martin. (2002), Learning to Teach History in the secondary school : A companion to school experience, Routledge, Falmer, (Taylor and Francis group), London, New York.
- Kumar, Sandeep (2013). Teaching of Social Science, Project Report, University of Delhi, Delhi.
- Kirkpatrick, Ecron, (1997). Foundation of Political Science: Research, Methods and Scope, New York, The free press.
- Mayor, F. (1992). The role of the Social Sciences in a changing Europe. International Social Science Journal (vol. 44).
- Misra, Salil and Ranjan, Ashish (2012) Teaching of Social Sciences: History, Context and Challenges in Vandana Saxena (ed.), Nurturing the Expert Within, Pearson, New Delhi
- Popper, Karl. (1971). The Open Society and its Enemies. Princeton University Press.
- Prigogine, I., & Stengers I. (1984). Order Out of Chaos: Man's New Dialogue with Nature. Batnam Books.
- UNESCO-World Social Science Report (2013)
- Wagner, P. (1999). The Twentieth Century – the Century of the Social Sciences? World Social Science Report.
- Wallerstein, I, et al., (1996). Open The Social Sciences: Report of the Gulbenkian commission on the Restructuring of the Social Sciences. Vistaar Publications, New Delhi.
- Webb, Keith (1995). An Introduction to problems in the philosophy of social sciences, Pinter, London, New York.
- Winch, Peter (1958). The idea of a Social Science and its relation to Philosophy Routledge and Kegan Paul, London, New York: Humanities Press.

1.4.3 SCIENCE

Contact Hours: 30

Max marks: 50

Credits: 2

OBJECTIVES

This course would enable the pupil teachers to understand Science as a discipline through its philosophical and epistemological perspectives. The insights into the nature of science and how children construct knowledge science would help in developing a critical understanding about the curriculum in science and how it unfolds through the transactional processes at the various levels of school education. Thus, this course aims to lead the pupil teachers from an understanding about science discipline to a holistic understanding about science-education situated in learner context and social realities.

UNIT I : NATURE OF SCIENCE AND SCIENCE EDUCATION (10 hours)

- a) The nature of science- science as a process and science as a body of knowledge, as a social enterprise; Science-Technology-Society-Environment (STSE) Interface.
- b) A historical perspective: the development of science as a discipline; awareness of the contributions of Popper and Kuhn.
- c) A critical understanding of science as a subject at the various levels of school education and thereby of the purpose of science education at the various levels of school education.
- d) Development of Scientific Temper, public understanding of science, ethics of science; science education in the context of a developing country.

UNIT II: THE LEARNER CONTEXT (10 hours)

- a) Children's conceptualisation of scientific phenomena- Pre-conceptions in science and their significance in knowledge constructions (with linkages to learning at the primary level); Misconceptions and 'alternative frameworks' in science.
- b) Understanding children's fear of science addressing their inabilities to correlate the observed phenomena with micro level processes and with their symbolic/mathematical representations.
- c) Construction of knowledge in science: conceptual schemes, concept maps.
- d) Role and limitation of language: its contribution towards expression, articulation and the understanding of science.
- e) Addressing Learner-diversity: gender issues, special need-learners, contextual factors.

UNIT III: THE SCIENCE CURRICULUM**(10 hours)**

The nature and underlying criteria for a science curriculum and content organization. Approaches to curriculum transaction: integrated approach and disciplinary approach; Interdisciplinary.

- a. A critical review of Science Curriculum at the National Level i.e. NCERT curriculum, at the State Level i.e. SCERT curriculum, Hoshangabad Science Teaching Programme (HSTP) ; An awareness about science curricula at international level such as Nuffield Science project, Harvard Science project, project 2061 etc .
- b. Criteria for the analysis of science textbooks (including issues related to gender, the socio-cultural context, etc.)

Suggested Activities

1. Critical review of text book of 8th, 9th, 10th and PUC Classes
2. Concept mapping
3. Study of NCERT Curriculum of any class
4. Survey on Scientific Attitude/Learning Attitude towards Science
5. Study on opinion of public understanding of science
6. Role of Science in the developing country
7. Study of misconceptions in Science among secondary school Students
8. Study of achievers in the field of Science
9. Preparation of Biography of Local achievers in the field of Science (2 or 3)
10. Community resources to teach Science

Note: The College is free to introduce any other relevant and useful activity related to the subject.

Suggested Readings

1. Aikenhead, W. W. (1998). Cultural aspects of learning science. *Part one* , pp 39-52. (B. F. Tobin, Ed.) Netherlands: Kluwer academic Publisher.
2. Barba, H.R. (1997). *Science in Multi-Cultural Classroom: A guide to teaching and Learning*. USA: Allyn and Bacon.
3. Bevilacqua F, Giannetto E, & Mathews M.R., (eds.). *Science Education and Culture: The Contribution of History and Philosophy of Science*. The Netherlands: Kluwer Academic Publishers.
4. Cobern, W. W. (1998). *Socio-Cultural Perspectives on Science Education*.
a. London: kluwer Academic Publisher.
5. Deo, M.G. & Pawar, P.V. (2011), General Article: Nurturing Science Talent in Villages, In *Current Science*, Vol. 101, No. 12, pp1538-1543.

6. Hines, S. M. (Ed.). (2005). *Multicultural science Education: Theory, Practice, and Promise* (Vol. 120). New York, U.S.A: Peter Lang.
7. Lee, E. & Luft, J. (2008), Experienced Secondary Science Teachers' Representation of Pedagogical Content Knowledge. *International Journal of Science Education* 30(10), 1343-1363(21),
8. Lee, O. (2003). Equity for Linguistically and Culturally Diverse Students in Science Education. *Teachers College Record*, 105 (3), pp 465-489.
9. Lynch, S. J. (2000). *Equity and Science Education Reform*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
10. *National Curriculum Framework for Teacher Education: Towards Preparing Professional and Humane Teacher (2009-10)*, NCERT: New Delhi
11. *National Curriculum Framework, (2005)*, NCERT: New Delhi 12. Newsome, J. G. & Lederman, N. G. (Eds.) (1999), *Examining Pedagogical*
12. *Content Knowledge: The Construct and its Implications for Science Education*. Kluwer Academic Publishers, The Netherlands
13. Parkinson, J. (2002). Chapter-1. Learning to Become an Effective Science Teacher. In *Reflective Teaching of Science 11-18: Continuum Studies in Reflective Practice and Theory*. New York: Continuum. pp. 1-12.
14. Quigley, C. (2009). Globalization and Science Education: The Implications for Indigenous knowledge systems. *International Educational Studies* , 2 (1), pp 76-88.
15. *Rashtriya Madhyamik Shiksha Abhiyan (2005)*, MHRD: New Delhi 16. Rivet, A.E. & Krajick, J.S. (2008), *Contextualizing Instruction: Leveraging*
16. Students' Prior Knowledge and Experiences to Foster Understanding of
17. Middle School Science, In *Journal of Research in Science Teaching*, Vol. 45, No. 1, pp 79-100.
18. Sears, J. and Sorensen, P. (Eds.). (2000) *Issues in Science Teaching*. Routledge Falmer, The Netherlands.
19. Tobin, K. (Ed.). (1993). *The Practice of Constructivism Science Education* . Hillsdale, New Jersey: Lawrence Erlbaum Associates, Inc.

20. Van Driel, J.H.V., Beijaard, D. & Verloop, N. (2001), Professional Development and Reform in Science Education: The Role of Teachers' Practical Knowledge. *Journal of Research in Science Teaching*, 38(2), 137-158, February
21. Wallace J. and Louden W. (eds.). *Dilemmas of Science Teaching: Perspectives on Problems of Practice*. London: Routledge Falmer. pp. 191-204.
22. Wang, H. A and Schmidt, W. H. (2001). - History, Philosophy and Sociology of Science in Science Education: Results from the Third International Mathematics and Science Study. In F. Bevilacqua, E.
23. Giannetto, and M.R. Mathews, (eds.). *Science Education and Culture: The Contribution of History and Philosophy of Science*. The Netherlands: Kluwer Academic Publishers. pp.83-102. 1

1.4.4 MATHEMATICS

CONTACT HOURS: 30

MARKS: 50

CREDITS : 2

OBJECTIVES

After the completion of course, pupil teachers will be able to

1. Understand the concept of Mathematics as abstract patterns
2. Understand the structure of Mathematics
3. Evolution of axioms, postulates and different types of proofs in mathematics
4. Understand the socio – cultural, economic and political factors in the development of Mathematics
5. Understand the different beliefs relating to Mathematics learning Experiences
6. Understand How different psychological theory explains the learning of mathematics in class room
7. Know the Importance of problem solving, problem – posing, patterning, reasoning, abstraction and generalization; argumentation and justification
8. Intercept the importance of ‘Mathematics to all’ challenges and concerns related to it
9. Teachers understanding on Addressing the concerns of societal as well as mathematical equity

UNIT 1: INTRODUCTION TO MATHEMATICAL THINKING 12 hours

1.1 Mathematics as study of creating, discerning and generalizing patterns: Identifying and analyzing abstract patterns, patterns of shapes, patterns of motion, patterns of repeating chance, numerical patterns.

1.2 Understanding Mathematics as a humanly created subject: Creating Mathematical structures: idea of axioms, postulates and proofs, what is a proof? Different methods of proofs: Direct proof, indirect proof, counter examples, proof by induction.

1.3 Socio-cultural, economic and political factors in the development of mathematics. Everyday mathematics, multi cultural mathematics; its use in decision making, at the workplace

1.4 Societal beliefs related to ‘knowing’ and ‘doing’ mathematics. Critically challenging the sociological beliefs related mathematical abilities, mathematics confined to arithmetic.

UNIT 2: LEARNING MATHEMATICS**12 hours**

- 2.1 Developmental progression in the learning of mathematical concepts – Piaget, Skemp, Bruner and Vygotsky; Fischbein on intuitive thinking
- 2.2 Processes of dealing with abstractions, particularisation and generalization. Studying algorithms; what works and how
- 2.3 Focus on mathematical processes – problem solving, problem – posing, patterning, reasoning, abstraction and generalization; argumentation and justification
- 2.4 Socio-cultural perspectives in mathematics learning – situated learning; social construction of knowledge; social interaction and community of practice.
- 2.5 Historical evolution in concepts – Understanding how concepts evolved, power play in legitimizing concepts

UNIT 3: MATHEMATICS FOR EQUITY AND SOCIAL JUSTICE 8 hours

- 3.1 Why teach ‘mathematics to all’? – Concerns and challenges
- 3.2 Issues of gender, class and culture in mathematics learning and achievement – Expectations, attitudes and stereotypes; access to higher mathematics; interrogating the notion of ‘achievement gap’; construction of learners’ identity in a mathematics class room
- 3.3 Addressing the concerns of societal as well as mathematical equity

Suggested Activities

1. Prepare a presentation on the concept of mathematical thinking with appropriate examples.
2. Conduct a debate on the topic “It is necessary to teach Mathematics to all students upto class X”
3. List any five mathematical concepts that are learnt at the secondary level and discuss how they are relevant to life or how they can be made relevant to life. Support your answer with illustrations.
4. Prepare an essay discussing the advantages and limitations of using learning aids for teaching Mathematics

Note: The College is free to introduce any other relevant and useful activity related to the subject.

Suggested Readings

Bishop, A. J. (1988). The interactions of mathematics education with culture. *Cultural Dynamics*, 1(2), 145–157.

D’Ambrosio, U. (1985). Ethnomathematics and its place in the history and pedagogy of mathematics. *For the Learning of Mathematics*, 5(1), 44–48. Devlin K. (2011). Introduction to Mathematical thinking.

Ernest, P. (2009). New philosophy of mathematics: Implications for mathematics education. In B. Greer, S. Mukhopadhyay, A. B. Powell, & S. Nelson-Barber (Eds.), *Culturally responsive mathematics education* (pp. 43–64). Routledge.

Gutstein, E. (2007). “And that’s just how it starts”: Teaching mathematics and developing student agency. *Teachers College Record*, 109(2), 420–448. Kazemi, E., & Stipek, D. (2001). Promoting conceptual thinking in four mathematics classrooms. *The Elementary School Journal*, 102(1), 59–80.

MESE -001(2003). Teaching and Learning Mathematics. IGNOU series

Newman, J. (2003). *The World of Mathematics: A Four-Volume Series*. Washington Tempus

Sautoy, M. du. (2008). *The Story of Maths*. UK: BBC Four Documentary. (Also available as a book)

Timothy Gowers (2002). *Mathematics: A Very Short Introduction*. Oxford University Press

Wheeler D (1983). Mathematisation matters. *For the Learning of Mathematics*, 3(1).

Boaler, J. (2010). *The elephant in the classroom. Helping children love and learn maths*. Souvenir Press Ltd

Boaler, J. & Staples, M. (2005). Transforming students’ lives through an equitable mathematics approach: The case of RAILSIDESCHOOL. Available for download on: www.stanford.edu/~jboaler/

Boaler, J. (2013, March). Ability and Mathematics: The mindset revolution that is reshaping education. In *Forum* (Vol. 55, No. 1, pp. 143-52). Symposium Journals.

Burns, M. (2007). *About teaching mathematics: A K–8 resource*, Third Ed. Math Solutions Publications.

Gray, E, & Tall, D (1994). Duality, ambiguity, and flexibility: A “Proceptual” view of simple arithmetic. *Journal for Research in Mathematics Education*, 25(2), 116-140.

Jackson, K. J., Shahan, E., Gibbons, L., & Cobb, P. (2012). Setting up complex tasks. *Mathematics Teaching in the Middle School*, (January), 1–15.

Skemp, R. (1978). Relational understanding and instrumental understanding.

Arithmetic Teacher 26 (3), 1-16.

Ball, D. L., & Bass, H. (2003). Making mathematics reasonable in school. In *A research companion to principles and standards for school mathematics* (pp. 27–44).

Ball, D.L, Hill H.C. & Bass, H.(2005). Knowing mathematics for teaching. *American Educator*. Fall 2005.

Boaler, J. & Humphreys, C. (2005). *Connecting mathematical ideas: Middle school video cases to support teaching and learning* (Portsmouth, NH, Heinemann).

Boaler, J. (1993). The role of contexts in the mathematics classroom: Do they make mathematics more “real”? *For the Learning of Mathematics*, 13(2), 12– 17.

Chapin, O'Connor, & Anderson (2009). *Classroom discussions: Using math talk in elementary classrooms*. Math Solutions.

Cirillo, M. (2009). Ten things to consider when teaching proof. *Mathematics Teacher*, 103(4), 250-257.

Fuller, E., M Rabin, J., & Harel, G. (2011). Intellectual need and problem-free activity in the mathematics classroom. *Jornal Internacional de Estudos em Educação Matemática*, 4(1).

Hiebert, J., Carpenter, T., Fennema, E., Fuson, K., Wearne, D., Murray, H. (1997). *Making Sense: Teaching and learning mathematics with understanding*. Portsmouth, NH: Heinemann.

Kazemi, E. (1998). Discourse that promotes conceptual understanding. *Teaching Children Mathematics*, 4(7), 410- 414.

Knuth, E., Choppin, J., & Bieda, K. (2009). Proof: Examples and beyond.

Mathematics Teaching in the Middle School, 15(4), 206-211.

Lampert, M. (2001). *Teaching problem and problems for teaching*. Yale University.

Lockhart, P., & Devlin, K. J. (2009). *A mathematician's lament*. New York: Bellevue Literary Press.

Martino, A.M. & Maher, C. (1999). Teacher questioning to promote justification and generalization in mathematics: What research practice has taught us?. *Journal of Mathematical Behavior*, 18(1), 53-

NCERT (2012). *Pedagogy of mathematics: Textbook for two year B.Ed. course*.

New Delhi: NCERT.

Parish, S. (2014). *Number talks: Helping children build mental math and computation strategies, Grades K-5, Updated with Common Core Connections*.

Reinhart, S. (2000). Never say anything a kid can say! *Mathematics Teaching in the Middle School*, 5(8), 478-483.

Schifter, D. (2001). Learning to see the invisible. What skills and knowledge are needed in order to engage with students' mathematical ideas? In T. Wood & B.

Scott Nelson & J. Warfield (Eds.), *Beyond classical pedagogy: Teaching elementary mathematics*. Mahwah, (pp. 109-134). NJ: Lawrence Erlbaum Associates

Smith & Stein (2011). *Five practices for orchestrating productive mathematics discussions*.

Solomon, Y., & Black, L. (2008). Talking to learn and learning to talk in the mathematics classroom. In N. Mercer & S. Hodgkinson (Eds.), *Exploring talk in school* (pp. 73-90).

TIMSS Videos of mathematics classrooms available at: <http://www.timssvideo.com/videos/Mathematics>

Deborah Ball video on eliciting student thinking, MSRI interview of 6th graders. <http://www.msri.org/workshops/696/schedules/16544>

Davis, B. (1995). Why teach mathematics? Mathematics education and enactivist theory. *For the Learning of Mathematics*, 15(2), 2–9.

Davis, B. (2001). Why teach mathematics to all students? *For the Learning of Mathematics*, 21(1), 17–24.

Dweck, C.S. (2006). Is math a gift? Beliefs that put females at risk. In W.W.S.J.Ceci (Ed.), *Why Aren't More Women in Science? Top Researchers Debate the Evidence*. American Psychological Association.

Eccles, J & Jacobs, J.E. (1986). Social forces shape math attitudes and performance. *Signs: Journal of Women in Culture and Society*, 11(21), 367-380. Greer, B., Mukhopadhyay, S., & Powell, A. B. (Eds.). (2009). *Culturally responsive mathematics education*. Routledge.

Gutstein, E., Lipman, P., Hernandez, P. & de los Reyes, R. (1997). Culturally relevant mathematics teaching in a Mexican American context, *Journal for Research in Mathematics Education*, 28(6), 709- 737.

Rampal, A., Ramanujam, R. & Saraswathi, L.S. (1999). *Numeracy counts!* and *Zindagikahisaab* (2001). National Literacy Resource Centre, Mussoorie. Available at www.arvindguptatoys.com

Rousseau, C., & Tate, W. (2003). No time like the present: Reflecting on equity in school mathematics. *Theory Into Practice*, 42(3).

Schoenfeld, A. (2002). Making mathematics work for all children: Issues of standards, testing and equity. *Educational Researcher*, 31(1), 13-25.

1.4.5 COMMERCE

Contact hours: 30

Maximum Marks: 50

Credits: 2

OBJECTIVES

This paper is aimed at encouraging

1. Commerce students to re-engage with their discipline and revisit prevalent conceptualizations and practices.
2. Place of commerce education in society and the potential role that it can play in developing commercially conscientious citizens

UNIT 1 NATURE OF COMMERCE

10 hours

- a) Commerce Education: Evolution and Foundations of Historical and Socio-Political Context of Commerce Education
- b) Relationship of Commerce with business, trade, industry and economy: A Macro Perspective

UNIT 2 UNDERSTANDING KNOWLEDGE IN COMMERCE

10 hours

- a) Interrelationships within Commerce (Accountancy and Business Studies/ Management)
- b) Commerce and Social Sciences (linkages with Economics, Sociology, Geography and Law.

UNIT 3 COMMERCE AND SOCIETY

10 hours

- a) Understanding Ethics and Values
- b) Contemporary Business Environment and Commerce Education

ACTIVITIES

Note: The College is free to introduce any relevant and useful activity related to the subject.

Suggested Readings

1. Afzal, M. (2005). Analytical Study of Commerce Education at Intermediate Level in Pakistan. Doctoral Thesis. University of Punjab, Lahore.
2. Carmona, S., Ezzamel, M., Gutiérrez, F. (2004). Accounting History Research: Traditional and New Accounting History Perspectives, Spanish Journal of Accounting History. 1, 24-53.
3. Cherunilam, F. (2000). *Business Environment*. (11thed.). New Delhi: Himalaya Publishing House. (Chapter-4: Social Responsibility of Business)
4. Dymoke, S. and Harrison, J. (Ed.) (2008). *Reflective Teaching and Learning*. New Delhi: Sage. Chapter-4: Classroom Management
5. Lal, J. (2002). *Accounting Theory*. (2nded.). New Delhi: Himalaya Publishing House. (Chapter-2 Classification of Accounting Theory.
6. Wadhwa, T. (2008). Commerce Curriculum at Senior Secondary Level: Some Reflections. *MERI Journal of Education*. III (2), 52-59

1.4.6 UNDERSTANDING DISCIPLINES AND SCHOOL SUBJECTS

(This course is to be second course for those who do not have a better choice of selection with the first discipline based pedagogic choice)

Total Hours: 30 hours

Total Marks: 50

Total Credits: 2

OBJECTIVES

1. To understand the basic concepts associated with academic disciplines
2. To comprehend the meaning of interdisciplinary and multidisciplinary learning
3. To understand different approaches in interdisciplinary learning
4. To appreciate the different academic disciplines and their place in the school curriculum
5. To appreciate the role of academic disciplines in facing global challenges
6. To apply the understanding of academic disciplines in curriculum transaction
7. Module One: Academic Disciplines and Interdisciplinary Approach (17 lectures)

UNIT ONE: BASICS OF ACADEMIC DISCIPLINES

6 hours

- a) Meaning and characteristics of academic disciplines
- b) Emergence of academic disciplines
- c) Relationship between academic disciplines and subjects

UNIT TWO: TEACHING ACROSS DISCIPLINES

12 hours

- a) Classification of academic disciplines: Becher -Biglan typology (pure-hard, puresoft, applied-hard, applied-soft types) with emphasis on nature of knowledge in each type.
- b) Interdisciplinary and multidisciplinary teaching and learning: meaning , significance and role of the institution
- c) Strategies/ approaches for interdisciplinary learning (team teaching, experiential learning)

UNIT THREE: HUMANITIES AND SOCIAL SCIENCES IN THE CURRICULUM**6 hours**

- a) Place of Humanities and Social Sciences in present school curriculum
- b) Issues and challenges in teaching Humanities and Social sciences
- c) Role of Humanities and Social Sciences with respect to the following global issues :promoting peace and respecting diversity

UNIT FOUR: NATURAL SCIENCES AND MATHEMATICS IN THE CURRICULUM**6 hours**

- a. Place of the disciplines Science and Mathematics in present school curriculum
- b. Issues and challenges in teaching the disciplines Science and Mathematics
- c. Role of Science and Mathematics with respect to the following global issues: sustainable development and health issues.

Suggested Activities

1. Choose any one subject and analyse the same from historical, sociological, philosophical perspectives.
2. Select any topic for any class from VI to Class XII. Prepare a plan to transact the same using Team Teaching or Experiential learning.
3. Interview four professionals from different disciplines. Identify their perceptions, attitudes and biases about different disciplines. Compare the responses and prepare a short report of your findings.
4. Study the Hoshangabad Science Teaching Programme and make a presentation on the same.

Note: The College is free to introduce any other relevant and useful activity related to the subject.

Suggested Readings

1. Interdisciplinary Higher Education: Perspectives and Practicalities ... edited by W.Martin Davies, Marcia Devlin, Malcolm Tight, Emerald Group Publishing Ltd
2. Poonam Batra , Social Science Learning in Schools: Perspective and Challenges , Sage Publications
3. Curriculum, Syllabus Design and Equity: A Primer and Model, Edited by Allan Luke, Annette Woods and Katie Weir, Routledge Publications
4. Position Paper of National Focus Group on Teaching of Science, NCERT publication
5. Position Paper of National Focus Group on Teaching of Mathematics, NCERT publication
6. Position Paper of National Focus Group on Social Sciences, NCERT publication
7. Position Paper of National Focus Group on Teaching of Languages, NCERT publication
8. Mathematics Education in India: Status and Outlook, Edited by R. Ramanujam and K. Subramanian, published by Homi Bhabha Centre for Science Education
9. What are Academic Disciplines? Working Paper by Armin Krishnan Websites:
 - www.ivorgoodson.com/curriculum-studies
 - <http://serc.carleton.edu/econ/interdisciplinary/index.html>
 - http://eprints.ncrm.ac.uk/783/1/what_are_academic_disciplines.pdf
 - <http://journals.akoatearora.ac.nz/index.php/JOFDL/article/viewFile/42/41> -
 - http://www.ascd.org/ASCD/pdf/journals/ed_lead/el_195504_mccuskey.pdf -
 - <http://www.thirteen.org/edonline/concept2class/interdisciplinary/>
 - <http://apcentral.collegeboard.com/apc/public/repository/AP-InterdisciplinaryTeaching-and-Learning-Toolkit.pdf>
 - <http://dc.cod.edu/cgi/viewcontent.cgi?article=1121&context=essai>

- <http://www.eklavya.in/pdfs/HSTP/HSTP%2030%20years%20Review%201-3-2007.pdf>

[http://www.ryerson.ca/content/dam/lt/resources/handouts/ExperientialLearning Report.pdf](http://www.ryerson.ca/content/dam/lt/resources/handouts/ExperientialLearning%20Report.pdf)

-http://www.niu.edu/facdev/resources/guide/strategies/experiential_learning.pdf

1.5 ICT – BASIC COMPETENCIES

Contact Hours: 30

Total Marks: 50 (Internal Assessment)

Credits: Two

OBJECTIVES

This set of experiences is visualised with an assumption that student teachers should have a basic familiarity with computers, and to have much hands-on-experience.

UNIT I. ICT BASICS: OPERATING SYSTEM AND APPLICATION SOFTWARE

1. ICT: Meaning, importance and tools of ICT
2. Computer Hardware: Input-Output Devices
3. Introduction to Operating System
 - a. Features of different operating system(Ex: Obantu, etc)
 - b. Files and directory operations
 - c. Windows Explorer and desktop
4. Introduction to Application Software
 - a. Word Processor
 - b. Spreadsheets
 - c. Presentations
 - d. Database Management System

UNIT II COMPUTER APPLICATIONS AND INTERNET

1. Applications of computers in various fields of education: Evaluation, planning, Administration and management, and Library management, etc.,
2. Characteristics of a good computerized lesson plan
3. Application of computer in specific context: Teaching Learning Process, Attendance, Evaluation, e- Content, daily planner etc.
4. Internet: Introduction, advantages and disadvantages

Suggested Activities:

1. Prepare the printed teaching materials using the MS-Word (In any subject - Any unit to be selected, in any language). Use of self-learning materials for the anyone unit by using ICT.
2. Prepare the result sheet in MS-Excel showing the subject wise marks, total marks, percentage Rank, pass or fail, Graphical presentation
3. Preparation of PPT slides (at least 10) for classroom usage.
4. Create an e-mail-id and google account and exchange learning related information.
5. Preparation of a blog in Individual / Group.
6. Browse the search engines and download the relevant materials /information.
7. Prepare a list of Educational websites, Reference Books, Research papers etc that are useful in Education.
8. Prepare the submission of core papers with the help of ICT. (Anyone Topic from Anyone Subject)
9. Survey of educational sites based in India
10. Use of available software or CDs with LCD projection for subject learning interactions
11. Generating subject-related demonstrations using computer software
12. Enabling students to plan and execute projects (using computer based research)
13. Engaging in professional self-development
14. Interactive use of ICT: Participation in Yahoo groups, creation of 'blogs', etc
15. Collection of e-resources and Reporting. (Text-Books, Articles, Reports, Theses; Audio and Video Files related to educational technology)
16. Critical review of UNESCO ICT Competency standards for Teachers-2008
17. Write a report on INSAT programs.
18. Developing Educational blog in www.blogger.com , www.wordpress.com
19. Develop the news groups and report.
20. Creating an Account in Teacher tube/slideshare and sharing your video/powerpoint.
21. Downloading Anti-virus software through internet and installing to the system.

ASSESSMENT

Sl.No.	Items	Internal Marks	External Marks
1	Assignment / Lab Records	15	--
2	One Test	10	--
3	Practical Exam	25	--
	Total	50	00

	Sl.No	Work	Periods
Working hours per week:			
	1	Laboratory	4
		Total	4

Suggested Readings

Goel A. (2010). *Computer Fundamentals*. Dorling Kindersley, South Asia

Intel (2003). *Intel innovation in Education Intel, Teach to Future-Students Work Book* Kuar Heman, Meerut: R. Lal Publisher.

Kumar, Khushvinder and Kumar, Sunil (2004). *Computer Education*. Gurusar Sadhar: GBD Publications.

Kumar, Khushvinder and Kumar, Sunil (2004). *ICT Skill Development*. Gurusar Sadhar: GBD Publications.

Mansfield, R. (1993). *The Compact Guide to Windows, World and Excel*. New Delhi: BPB Publishing.

Rajaraman, V. (2004). *Fundamental of Computers*. New Delhi: Prentice Hall of India Pvt. Ltd.

Sharma, Lalit (2006). *Computer Education*. Ferozpur Cantt: Wintech Publications.

Singh, Tarsem (2009). *Basic Computer Education*. Ludhiana: Tandon Brothers.

Singh, Tarsem (2009). *ICT Skill Development*. Ludhiana: Tandon Brothers. Sinha, P.K. (1992). *Computer Fundamentals*. New Delhi: BPB Publications. Strawbridge S., Natiquette (2006). *Internet - etiquette in the age of Blog*. Software Reference Limited, UK

Tanenbaum, A. S. (1996). *Computer Networks*. New Delhi: Prentice Hall of India.

Thomas B.(1991) *Digital Computer Fundamentals*. Tata Mcgraw Hill edition. New York.

Walkenbach, J. (1997). *Excel 97 Bible*. New Delhi: Comdex Computer Publishing.

Wang J., Lau R.(2013). *Advances in Web-based Learning*. Springer Publication London.

1.6 LANGUAGE ACROSS THE CURRICULUM

2 Credits

50 marks (Internal Assessment)

Modalities of Transaction

Theoretical presentations

Discussions

Demonstrations

Supervised practice

Field work

Report writing and presentation

OBJECTIVES

- To enable student teachers to develop the ability to use language in an explicit and differentiated manner
- To develop the ability to use language for academic communication in different subjects
- To help student teachers develop an understanding of the centrality of language in the curriculum

UNIT 1: NATURE AND FUNCTIONS OF LANGUAGE IN GENERAL

Language is context based – Need to create input rich environment for language learning

Sources of inputs - Home, community, school environment, language syllabus, subject inputs

Transition from home tongue to school tongue to an academic language

Centrality of language in the curriculum - uses of language - for receiving auditory and textual information, reflecting, relating, conceptualizing, expressing/sharing – oral and written, giving feedback

UNIT 2: CONCEPT OF LANGUAGE ACROSS THE CURRICULUM – ASSUMPTIONS – NEED FOR CONSIDERATION

Language learning and learning of different subjects – interrelationships – influence of language proficiency on the learning of other subjects

Implications of LAS to school practices

- ✓ Conscious use of the language component for enhancing subject communication
- ✓ Collaboration of all subject teachers and the language teachers in a school – Language learning as a responsibility of all teachers of a school

Suggested Activities

The activities suggested below are general in nature. They can be restructured to fit into the framework of particular subjects. Thus the same activity could be used by student teachers belonging to different methods of teaching.

Each activity should be followed by presentations and reflections. Student teachers are expected to add all the reports and details of discussions done to their profile and make the profile available to assessment as and when needed.

1. Activities for developing reading comprehension in subject areas – reading literature in the subject and making presentations followed by reflections
2. Creating subject dictionaries/vocabulary lists along with notes on their specialized usages
3. Observations on use of language in content subjects – analysis of answer sheets, listing of common errors
4. Identifying subject specific language needs – structures as well as terminology
5. Making a list of common minimum language for learning in general
6. Analysis of student language errors – how far are they language specific and content specific?
7. Identifying critical areas for enhancement of student competence in using language across subjects
8. Reading literature/Review of literature related to each subject, reading newspaper articles, presentations followed by discussions

9. Creation of wall magazines in respective subject areas – group work
10. Groups discussions and presentations – on various topics relating to different subjects
11. Listening to lectures by experts, professionals(live or recorded) and preparing a brief write up on the same, presentation and reflections
12. Watching a video programme, preparation and presentation of reports followed by reflections
13. Seminars on various related topics – preparation of seminar papers, presentations followed by discussions(They could be encouraged to write seminar papers following the norms for writing journal articles)
14. Organising programmes in their respective subject areas – group work – assess the programme from the language point of view
15. Pick and speak/role play/drama based on subject specific themes
16. Debates on controversial issues in subject areas followed by reflections on the language used for debating
17. Reading biographies, fiction based on history, science fiction followed by presentations and discussions on the same
18. Visits to historical places/places of importance and discussions/preparing reports
19. Textbook analysis from the point of view of the language used
20. Analysis of definitions, trying to redefine the same content using different words – discussions on its success/failure
21. Information transfer exercises – from table to text and the vice versa, from numerical to verbal and the vice versa, from text to visuals like pictures, graphs etc and the vice versa
22. Working out real and applicable illustrations/analogies to enhance communication
23. Making observations on language used for narration, description, reporting, explanation, in written and oral communication
24. Interviewing eminent personalities and presenting a report on the same
25. Viewing TV programmes, preparing a write up on what is viewed
26. Preparation of a set of questions(including higher order questions) on a given content
27. Watching a film – observing and analyzing the language used, pronunciation and tonal variations in dialogue presentations – co-ordination of verbal expression with body language
28. Read a novel/play, watch its film and make observations on the use of language in both the forms – changes and their appropriateness followed by discussions and implications for personal use of language

Note: The College is free to introduce any other relevant and useful activity related to the subject.

Assesment – Internals only

A total of self assessment, peer assessment and teacher assessment could be considered for the final internal assessment for 50 marks.

Student teachers will take up activities from the point of view of their pedagogic subjects.

Any five activities can be considered for internal assessment purposes. The assessment could be based on the following.

Along with each activity, a set of criteria for assessment could be evolved and given to students. This will help them get a better focus on what they are doing.

Suggested Readings

1. National Curriculum Framework, 2005(P.38, 39)
2. NCFTE 2010 (P.36)
3. VOLLMER, Helmut Johannes, Language Across the Curriculum available at <https://www.coe.int/t/dg4/linguistic/Source/Vollmer-ppt.pdf>
4. [http://tic.edu.hk/it-school/php/webcms/files/upload/tinymce// school document/lac_handbook_final_16_dec_14_1420533519.pdf](http://tic.edu.hk/it-school/php/webcms/files/upload/tinymce//school_document/lac_handbook_final_16_dec_14_1420533519.pdf)
5. <http://languagesacrossthecurriculum.com/>

1.7 PSYCHO-SOCIAL TOOLS AND TECHNIQUES

(as per suggestions given in state syllabus page no.32.)

Credits: 2

Marks: 50 (Internal Assessment)

Lab Assignments: (Conducting Practicum in lab situation)

Administering any four of the following standardized psychological tests with a brief theoretical background.

- Test on Intelligence
- Creativity
- Attitude
- Personality
- Adjustment
- Letter – Digit Substitution
- Division of Attention
- Distraction of Attention

- To test the career choice among adolescents – tests on Educational Interest and aptitude can also be given
- Any other psychological tool available in the college

Field assignments: (Conducting Practicum in outdoor situation)

Any two field assignments must be recorded in the journal

- Sociometry
- Case study
- Witnessing the counselling session and report on it
- Survey any critical issues related to behavioural problems school children
- Observation schedule for particular problem related to the adolescents
- Test for colour blindness and other readability problems of a class students and report the findings
- Any other

Reporting the Journal Record and Submission (20 marks) – include

- These test reports of (any four) must be recorded along with the brief theoretical background along with procedure of administration and assessment criteria.
- Field Assignment on (any two)of them must be recorded for submission

Examination of the lab work (20 marks) - by External Examiner

Any one of the test has to be administered and assessed by the student independently with a report.

1.8 Simulation and Micro Teaching (as per State syllabus page no.27)

Credits: 2

Marks: 50 (Internal Assessment)

A. Micro Teaching (Six Skills)

- 30 marks

- 1)Skill of Introduction
- 2)Skill of probing questions
- 3)Skill of explanation
- 4)Skill of illustrations with examples
- 5)Skill of stimulus variation
- 6)Skill of reinforcement

B. Simulation (Non Microteaching)

- 10 marks

Integration and overall skill with teaching-learning process for 15 min. each

C. Simulation Lesson (At college level)

- 10 marks
