SEMESTER – II

Instructional hours per Subject : 90 (Theoretical Discourses – 60 & CE – 30 hours)

Perspectives in Education/Core Subjects:

EDU-06 : Education in Indian Society

EDU-07 : Perspectives of Learning and Teaching

EDU-08 : Assessment in Education

Curriculum and Pedagogic courses/Optional subjects:

EDU-09. 1-13 : Curriculum and Resources in Digital Era: ……..…Education

EDU-10. 1-13 : Techno-Pedagogic Content Knowledge Analysis: ……....

SEMESTER II

EDU - 06: EDUCATION IN INDIAN SOCIETY

COURSE OUTCOMES

CO 1: To Develop an understanding of the evolution of education in Indian society
CO 2: To identify the role education in national development
CO 3: To recognize initiatives in modern Indian education
CO 4: To analyse the challenges in Indian education and the role of teacher in the changing scenario
CO 5: To familiarise with the emerging trends of education

Hours to transact: **90 hrs**

UNIT 1: MILESTONES IN INDIAN EDUCATION (35hrs)

UNIT II: EDUCATION FOR ECONOMIC AND NATIONAL DEVELOPMENT (10hrs)

UNIT III : INITIATIVES IN INDIAN EDUCATION (20hrs)

UNIT 1V: CHALLENGES AND TRENDS IN INDIAN EDUCATION (25 hrs)

UNIT 1: MILESTONES IN INDIAN EDUCATION (35 hrs)

Course Specific Outcome (CSO)	**Major concepts**	**Strategies AndApproaches**	**Assessment**
1.To develop an understanding of the evolution of education in Indian society 2. To acquaint with existing educational policies commissions in India 3.To understand changes of education system in Kerala	• Dravidian education- social structure-literature-Institutions for scholastic, recreational and legal functions- role of 'salai 'in higher education • Vedic education-characteristics and curriculum- significance of Upanishad in maintaining world peace and sustainable development, Vidya and Vaidya as two pillars of a civilized society • Buddhist education- aim of education and curriculum, Significance of non violence and attitude against materialistic life style. • A brief account on history of Indian education during British period Education in post independent India: • Radhakrishnan Commission(1948) • Secondary Education Commission(1952-54) • Kothari Commission report(1964-66) • New Education Policy 1986	Historical method Integrating ICT Lecture-discussion e- learning Document analysis Historical method and document analysis	Role Performance Analysis in group Discussion Involvement in Debates Seminar Presentations Assignments **Internal Test**

REFERENCE -

- Naik, J.P. (1998). The Education Commission and After. New Delhi: Publishing Corporation.
- Sripati, V. and Thiruvengadam, A.K. (2004), "India: Constitutional Amendment Making The Right to Education a Fundamental Right", *International Journal of Constitutional Law*, 2 (1): 148–158, Oxford University Press
- Report of Secondary Education Commission. Kothari D.S. (1965). New Delhi: Ministry of Education.

- Govt. of India (1986). National Policy on Education, Min. of HRD, New Delhi.
- Govt. of India (1992). Programme of Action (NPE). Min of HRD.
- National Curricular Framework-2005 , 2009
- Right to Education Act -2009
- Knowledge Commission reports 2006, 2007, 2009
- UNESCO reports on Teacher education
- .*Learning without Burden,* Report of the National Advisory Committee. Education Act. Ministry of HRD, Department of Education, October, 2004.
- http://www.gktoday.in/rashtriya-ucchatar-shiksha-abhiyan

- UNESCO reports on Teacher education
- .*Learning without Burden,* Report of the National Advisory Committee. Education Act. Ministry of HRD, Department of Education, October, 2004.

- http://www.gktoday.in/rashtriya-ucchatar-shiksha-abhiyan
- https://mhrd.gov.in/
- https://www.indiaculture.nic.in/
- https://innovate.mygov.in/wp-content/uploads/2019/06/mygov15596510111.pdf

UNIT 2: EDUCATION FOR ECONOMIC AND NATIONAL DEVELOPMENT (10hrs)

Course Specific Outcome (CSO)	Major concepts	Strategies And Approaches	Assessment
1. To identify the relationship between education and national development 2. To understand the role of IPR in national development	• Social Indices of National Development • Education as an investment- Share of GDP to Education • 'Educated unemployment'- Causes and Remedies • Education an instrument for intellectual property and inventions and discoveries for the welfare of the society- (IPR)- Industrial property rights- copy rights and related rights	Meaningful verbal expression Document analysis Panel Discussion Debates Seminar	Role Performance Analysis in group Discussion Extent of awareness on contemporary educational events

REFERENCE -

- Amirish Kumar Ahuja. (2007).Economics of education. Authors Press
- Jagannath Mohanty (1998). Modern Trends in Indian Education. New Delhi: Deep and Deep publications
- Humayun Kabir (1951). Education in New India. London: George Allen and Unwin Ltd.
- Subash Chandra Roy.(2009) Lecture on Intellectual property law. Chandighar National university, Patna
- Sharma. R.A. (2007). Economics of education. Surya Publication
- https://data.worldbank.org/indicator/SE.XPD.TOTL.GD.ZS

UNIT 3 : INITIATIVES IN INDIAN EDUCATION(20 hrs)

Course Specific Outcome (CSO)	Major concepts	Strategies /Approaches	Assessment
1. To familiarize with the functions of state and central Apex bodies of education 2. To familiarize constitutional goals pertaining to education	• Programmes and Schemes -DPEP,SSA,RMSA, RUSA • Apex bodies- CABE,NCERT,SCERT, DIET, UGC, NCTE, NAAC, NUEPA • Constitutional Goals - Articles of Indian Constitution Pertaining to Education –Preamble. • Article 21 A, Article 14, Article15, ,Article 30,Article 45, Article 46, Article 41, Article 51 A, Article 350A, Article 351 • Right to Education Act 2009	Debates Lecture discussion Documentation and discussion	Performance in debates Seminar presentations An extension activity related to the field of reference may be conducted

REFERENECES -

- Entwistle, N.(1990). Hand book of educational ideas and practices. London: Roputledge
- Mukopadhyaya et.al.(2008). Globalization and challenges for education. NIEPA. Shipra Publication
- Kohli, V.K. (1987). Indian Education and Its Problems. Haryana: Vivek Publishers.
- NCERT (1986). School Education in India – Present Status and Future Needs, New Delhi.
- http://www.indiaeducation.net/apexbodies/nuepa/
- http://www.naac.gov.in/
- https://www.india.gov.in/sites/upload_files/npi/files/coi_part_full.pdf

UNIT 1V: CHALLENGES AND TRENDS IN INDIAN EDUCATION (25 hrs)

Course Specific Outcome (CSO)	Major concepts	Strategies /Approaches	Assessment
1. To analyze the challenges of Indian Education 2. To synthesis the significance of human rights education and peace education 3. To keep awareness on futurology of education	• Current Problems of Indian education – Primary- secondary- higher education • Population Education – Need, Trends in Demography, Population explosion and adverse effects • Human Rights education- Meaning and significance	Brain storming Debates Lecture-discussion ICT	Analysis in group Discussion Extent of awareness on contemporary educational events

REFERENECES -

- Agarwal. J.C. (2006). Education for values, Environment and Human Rights. Shipra publications. New Delhi
- Dyakara Reddy. D. & Rau.(2007). Value education. Discovery publishing House. New delhi
- Dhananjaya Joshi.(2006). Value education in global perspectives, Lotus Press
- Yogendra Singh.(2007). Modernisation of Indian tradition. Rawat publication. New Delhi
- http://nhrc.nic.in/press-release/human-rights-education
- https://ncertbooks.ncert.gov.in/login
- NCTE : National Council For Teacher Education". *www.ncte-india.org*. Retrieved 8 April 2018.

List of Activities for Core Paper :

EDU VI: EDUCATION IN INDIAN SOCIETY

Units	ICT	Debate/ Seminar	Field Work	Group Discussion	Others
Unit I **MILESTONES IN INDIAN EDUCATION**	Prepare e-content on various Education Commissions	Merits and Limitations of British system of education	Survey on the implementation aspects of Right to Education Act 2009	Discussion on the significance of DPEP, SSA, RMSA Evolution of education in Kerala	Documentation on The functions of state and central administrative bodies related with education
Unit II **EDUCATION FOR ECONOMIC AND NATIONAL DEVELOPMENT**	Create Virtual Tour- future scenario of education			Social Indices of National Development Share of GDP to Education, Role of NKC ,	Panel Discussion Education an instrument for IPR
Unit III **INITIATIVES IN INDIAN EDUCATION**	Create Virtual Tour on Indian Constitution pertaining to education-	Apex bodies		Constitutional provisions -Articles of Indian Constitution Pertaining to Education.	

Unit IV **CHALLENGES AND TRENDS IN INDIAN EDUCATION**		Problems of Indian education – Primary- secondary - higher education	Special School Inclusive Education – Meaning, Relevance and Practices	Significance of human rights education Education	• Census Analysis - Population Education. • Mass media analysis- Human Rights education • Brain Storming- Gender issues in education

EDU - 07 : PERSPECTIVES OF LEARNING AND TEACHING

(Theoretical Discourses – 60 & CE – 30 hours)

COURSE OUTCOMES (C O) To enable the student teacher to:

- **CO 1** To understand the concept, nature and factors influencing learning
- **C O 2** To gain an insight into the mental processes involved in learning
- **C O 3** To develop an understanding of the process of learning through various theoretical perspectives
- **C O 4** To familiarise the cognitive functions of learning
- **C O 5** To conceptualise the basics of neuroscience
- **C O 6** To understand motivation and its educational significance
- **C O 7** To develop an understanding of the concept and areas of Individual difference.
- **C O 8** To explain the concept and types of 'exceptional children'.
- **C O 9** To conceptualise Learning Disability and inclusive education
- **C O 10** To develop skills to educate students with special needs.

Contents :

UNIT I NATURE OF LEARNING
UNIT II COGNITIVE PROCESSES IN LEARNING
UNIT III THEORIES OF LEARNING
UNIT IV INDIVIDUAL DIFFERENCES IN LEARNING

UNIT I NATURE OF LEARNING 20hours (15T+ 5P)

Course Specific Outcome (CSO)	Major concepts	Strategies & Approaches	Assessment
To understand the concept, 1.nature and factors influencing learning. To develop an understanding of 2. the process of learning. 3. To conceptualise the role of motivation in learning 4. To familiarise the concept of achievement motivation	Meaning, Definition & Characteristics of learning, Factors affecting learning - learner, Method and Task variables, Learning curve, Plateau in learning, Study habits- Concept and methods, Transfer of Learning. Motivation- Concept, Types, strategies Theories - Abraham Maslow, Achievement motivation	Lecturing Group discussion on factors affecting learning Brainstorming on method and task variables of learning Field study onintrinsic and extrinsic Motivation, Construction of learning curve	Test paper Assignments Practicum Presentation in seminars Performance based assessment

Reference

- Gates, A.S and Jersild, A.T, (1970) Educational Psychology, New York :Macmillian.
- Aggarwal, J.C (1994) Essentials of Educational Psychology New Delhi :Vikas Publishing House
- Dandapani, S. (2007), A Text Book of Advanced Educational Psychology; New Delhi: Anmol Publications Pvt. Ltd.

UNIT II : COGNITIVE PROCESSES IN LEARNING 20hours (15 T+ 5 P)

Course Specific Outcome (CSO)	**Major concepts**	**Strategies & Approaches**	**Assessment**
1. To familiarise the cognitive processes 2 .To conceptualise cognitive capacities 3 .To understand the relevance of Cognitive processes 4. To familiarise the concept of	Sensation and Perception- factors, laws, Concept formation, Illusion cognitive functions -Thinking, Reasoning- Problem solving and Meta cognition	Lectures Preparation of a Concept map	Test paper Performance based assessment Practical work

memory and forgetting	Memory- Concept; Types & Strategies to develop memory, Forgetting- causes , -Interference theory and problems	Group discussion on strategies for improving Memory, Reasoning and Problem solving Seminars	

Reference

- Hughes, A.G & Hughes, E.H(2005) Learning and Teaching , New Delhi, Sonali Publications
- Hunt, R. Reed & Ellis, Henry C.(2007) Fundamentals of Cognitive Psychology, New Delhi, Tata McGraw-Hill Publishing Company
- Skinner .E.C(2003) Educational Psychology, New Delhi, Prentice Hall of India Pvt.Ltd.

UNIT III THEORIES OF LEARNING 20 hours (12T+8P)

Course Specific Outcome (CSO)	Major concepts	Strategies & Approaches	Assessment
1. To develop an understanding of the process of learning through various theoretical perspectives. 2. To familiarize behaviorist, constructivist and information processing approaches in learning 3. To compare the different approaches in learning 4. To develop learning strategies based on different perspectives	• Behaviorist approach- Thorndike, Pavlov and Skinner. • Cognitive approach- Gestalt • Constructivist approach- Individual and Social- Piaget, Bruner &, Vygotsky. • Gagne's hierarchy of learning. • Expository learning- Ausubel	Lectures Critical evaluation of different approaches - Use peer tutoring technique List suitable learning activities based on constructivist Approach Cooperative and Collaborative Learning activities Debate on behaviourism vs constructivism Psychology Lab experiments (any two)	Performance in activities Test paper Group discussion Assignments

Reference

- Mathur.S.S(2007) Educational Psychology, Agra-2, VinodPustakMandir
- Schunk, D.H (2011); Learning Theories: An Educational Perspective, India: Pearson
- Sternberg, R.J.(2006), Cognitive Psychology (4th ed.) U.K.: Thomson Wardsworth

UNIT IV INDIVIDUAL DIFFERENCES IN LEARNING 30 Hours (20 T+ 10P)

Course Specific Outcome (CSO)	**Major concepts**	**Strategies & Approaches**	**Assessment**
1. To develop an understanding of the concept and areas of Individual Difference. 2 To equip the teacher for understanding the learner in the context of their socio cultural and	Concept of Individual Differences- Areas of individual Differences - Interest, Attitude and Aptitude. Persons with disability- Types ofdisability – congenital, acquired, multipledisabilities. Education for children withSpecial needs: Special Schools, Integrated Education Understanding the educational needs of	Lectures Field visits Institutional survey Identification ofexceptionalcategories Design of learningstrategies for Seminars/Discussions First hand experiencewith exceptionallearners and learningdisabled children	test papers Assignments Practical Activities field Visit Report Performance assessment Observation

educational background 3 To familiarize the specific factors leading to individual difference. 4 To develop skills to educate students with special needs.	Exceptional learners - Gifted and Slow Learners, Underachiever, Mentally Challenged, ADHD, Learning Disability-Dyslexia, Dysgraphia, Dyscalculia and Dyspraxia, Autism, Deafness, Blindness, Deaf-blindness Inclusive education- National Policy and Acts RCI(1992),PWD (1995), NTA (1999),RTE(2012)	Direct experience inspecial schools Screening of movies that have first hand educationalexperiences.	reports Intervention activities Practicum

Reference

- Ker. C (1998) Exceptional Children, New Delhi, Sterling Publishers.
- Rao KS, Rao DB (2005) Gifted and Talented Education, Sonali, New Delhi
- Sharma P.L (1988), A Teachers Hand Book on IED Helping Children with Special Needs NCERT, New Delhi.
- **Balsara, Maitreya (2011) Inclusive Education for Special Children: New Delhi: Kanishka Publishers and distributors**
- Allport, G.W, (1960). Personality: A psychological Interpretation .NewYork: Henry Holt and Company .
- Anastasia, Anne (1982). Psychological Testing NewYork: Mc Millan Publishing Company.
- Baron, Robert A, (2003). Social psychology (10th ed). New Delhi :Prentice Hall of India
- Baron, Robert A, (2003). Psychological (3rd ed). New Delhi, 110092 :Prentice Hall of India.
- Benjamin, W.B., (1985). Hand book of Human Intelligence:Theories, Measurement and Application John, London : Wiley of Sons Inc.
- Beveridge, WIB, (1980). Seeds of Creativity London : Heinemann Educational Book Ltd.
- Carroll, H.A (1984) Mental Hygeine New York, Prentica Hall Publishing Co.
- Crow, L.A and Crow A Educational Psychology (1973) New Delhi : Eurasia Publishing House.
- Duric, L (1990)Educational Psychology New Delhi : Sterling Publishers.
- Entwistle,N.J.(1990). Handbook of educational ideas and practices.London:Routledge
- Ewen, R.B (1980)An Introduction to theories of Personality New York : Academic Press.
- Fisher, Ronald j. (1982). Social Psychology, An Applied Approach. New York : St. Martins Press.
- Hartney, Elizabeth (2008): Stress Management for teachers; U.K: Continuum

- Jangira, N.K., etal (1991). Functional Assessment Guide. New Delhi : NCERT.
- Kinchelore, J.L., & Horn, R.A (Eds.) (2007) The Praeger Handbook of Education andPsychology; India: Praeger (vol. 1,2,3,&4)
- Kochar, S.K (1993), Educational and Vocational Guidance in Secondary Schools. New York : Sterling Publishers.
- Kuppuswami, B. (1967). An Introduction to Social Psychology. Bombay :AsiaPublishing House.
- Martin, garry and Pear, Joseph (2003) .Behaviourmodification : what it is and How to do it (7th Ed.). New Delhi: Prentice Hall of India . 110 092.
- Moghaddam, F.M. (2007) Great Ideas in Psychology: A Cultural and Historical Introduction; India: Oxford; One World.
- Musser, P.H, Conger, S and Kagar, P (1964) Child Development and Personality, New York : Harper Row
- Personality Classic Theories & Modern Research.New Delhi, Pearson Education
- Reilly, P.R &Levis, E (1983) Educational Psychology New York :Macmillian Publishing Co Ltd.
- Sindhu, I.S., (2013); Educational Psychology: India
- Umadevi, M.R.,(2009) Educational Psychology: Theories and Strategies for Learning and Instruction, Bangalore, Sathkruthi Publication

Websites

- http://www.libraries.psu.edu/
- http://www.teacher.net
- www.moodle.org
- http://teamwork.sg/teamwork/schoolportal.aspx
- http://www.enhancelearning.co.in/SitePages/Index.aspx
- http://www.e-learningforkids.org/courses.html
- http://en.wikipedia.org/wiki/Wiki
- http://www.webopedia.com/welcomead/
- http://www.filehippo.com/
- http://www.padtube.com/Windows

SEMESTER II

EDU - 08 : ASSESSMENT IN EDUCATION.

(Theoretical Discourses – 60 & CE – 30 hours)

Course outcome (CO):

The student teachers will be able to:

- CO 1 Understand the concept and nature of Assessment and Evaluation in education
- CO 2 Understand the role of Assessment and Evaluation in teaching-learning process
- CO 3 Examine the contextual roles of different forms of assessment in schools
- CO 4 Acquaint with the new evaluation practices in education
- CO 5 Realize different dimensions of learning
- CO 6 Familiarize with various assessment procedures, tools and techniques
- CO 7 Develop an investigatory attitude through a proper understanding of the paradigms of research
- CO 8 Develop the capability for research embedded instruction
- CO 9 Integrate action research practices in the teaching-learning context
- CO 10 Develop ability in analyzing and interpreting assessment data
- CO 11 Understand the methods of finding important statistical measures and **r**epresenting data using graphs

Contents

UNIT I: Perspectives on Assessment and Evaluation (25 hrs)
UNIT II: Tools and Techniques to assess Learner's performance (20 hrs)
UNIT III: Basic Statistics for Analysis and Interpretation of Assessment data (25 hrs)
UNIT IV: Introduction to Research in Education (20 hrs)

UNIT I :Perspectives on Assessment and Evaluation(25 hrs)

Course Specific Outcome (CSO)	Major concepts	Strategies & Approaches	Assessment
1. To Distinguish clearly between assessment and evaluation 1. To state the purposes of evaluation and to enlist various types of evaluation 2. To acquaint the students with taxonomy of instructional objectives 3. To identify the factors to be considered for successful assessment 4. To familiar with the Current practices in evaluation	• Assessment and Evaluation in Education - Purposes of Evaluation • Types of evaluation-Formative and Summative, Outcome Evaluation, Process Evaluation, Self Evaluation, Peer Evaluation, Product Evaluation, External Evaluation, Internal Evaluation and Objective based Evaluation. • Brief introduction to Instructional objectives as the basis of scientific evaluation-Bloom's taxonomy of educational objectives; Domains of learning – cognitive, affective and Psycho motor. • Factors to be considered for successful assessment • Current practices in assessment and evaluation –CCE-concept, need and relevance, Grading system- concept, types-absolute grading, direct grading and relative grading, merits and demerits. Grade Point Average, Cumulative Grade Point Average, Weighted average and weighted score/point. Classification of learners according to their level of performance in Grading system (By giving letter grades such as: A+, A, B+,B etc.)	ICT enabled group discussion Lecture-discussion Group Discussion Meaningful verbal Expression Collaborative interaction Lecture and Discussion	• Document Analysis • Field visit reports • Class test • Role Performance • Analysis in group Discussion • Seminar Presentations

UNIT II: Tools and Techniques to assess Learner's Performance (20 hrs)

Course Specific Outcome (CSO)	Major concepts	Strategies & Approaches	Assessment
1. To understand different techniques of assessment like interview, self-reporting and testing and their applications in the field of education. 2. To familiarize with various tools of assessment and develops skill in applying in the field of research 3. To understand the qualities of a good evaluation tool 4. To understand Norm Referenced and Criterion referenced Evaluation 5. To develop the ability to construct the tools such as Diagnostic Test and Achievement Test 6. To familiarize with the relevance of online	• General **Techniques of Assessment-** Observation, projects, assignments, worksheets, practical work, seminars and reports, Interview, Self reporting. • **Tools of Assessment**- tests, checklist, rating scale, cumulative record, questionnaire, inventory, schedule, anecdotal record- concept, merits, demerits - relevance in the field of research • **Characteristics of a good evaluation tool**- validity , reliability, objectivity and practicability • **Norm-referenced tests and Criterion-referenced tests**. • **Diagnostic Test and Achievement Test**- Concept, Purpose and Distinction between the two tests, Steps involved in the construction of an Achievement test and Diagnostic test, Types of items-Objective type, Short answer type and Essay type, Item analysis-concept, Teacher made and Standardized Achievement tests.	Lecture Cooperative Learning Discussion Collaborative Interaction in Debates Working on online Resources Group discussion and Presentation Discussion& Presentation	• Initiation nd performance in dramatization • Role Performance Analysis in group Discussion • Involvement in Debates • Seminar Presentations • Class test • **(Practicum- Development of any one Evaluation tool)**

Examination, portfolio and rubric assessment	• Online examination/Computer based Examination,PortfolioassessmentandEvaluation based on Rubrics		

UNIT III: Basic Statistics for Analysis and Interpretation of Assessment data (25 Hrs)

Course Specific Outcome (CSO)	Major concepts	Strategies & Approaches	Assessment
1. To understand the need, importance and meaning of Statistics 2. To familiarize the relevance of statistics in analyzing data 3. To understand the meaning and nature of data 4. To tabulate the data in a meaningful and systematic way 5. To appreciate the	• Role and importance of statistics in analyzing assessment data, Population and Sample • Data, Types of Data- Primary & Secondary, Quantitative & Qualitative • Classification of Data, Frequency Table (Grouped & Ungrouped) • Graphical Representation of Data- need and importance, Representing data using Bar Diagram and Pie Diagram, Histogram, Frequency Polygon, Frequency Curve and Ogives, Interpretation of graphical representations.	Narrative expression in small group Group Discussion Meaningful verbal Expression Active learning process, Advance organizer Approach Techno- lab	• Evaluation based ondocumentation. • Role performance analysisin group discussion • Participant observation • (Practicum - on Graphical Representation of any **Data)**

importance of the organization of data 6. To understand the advantages of graphical representation of data 7. To represent data using appropriate graphic representation and interpret accordingly		activities & Individual assignments	
8. To find out different measures of central tendency 9. To select the most appropriate measures of central tendency for the treatment of data 10. To find out different measures of Dispersion 11. To select the most appropriate	• Descriptive Statistical Measures : Measures of Central Tendency- Mean, Median, Mode- concept and methods of finding each measure and when to use each measure. Measures of Variability/Dispersion- Range, Mean Deviation, Quartile Deviation, Standard Deviation-concepts and methods of finding each measure and When to use each measure.	Active learning Process Computation Mathematical problem solving Class wise discussion through Lecture. Presentation Narrative expression in small group Problem solving	• Evaluating the product and • process

measures of dispersion for the treatment of data 12. To familiarize with the use of correlation for data analysis 13. To understand the method of calculating correlation coefficient using rank difference method	• Correlation-meaning and importance, Concept of Coefficient of correlation, Types of Correlation-Positive, Negative, Zero and Perfect Correlation, Rank Difference Method of calculating Coefficient ofcorrelation,interpretation of correlation.		

UNIT IV: Introduction to Research in Education (20 hrs)

Course Specific Outcomes (CSO)	Major concepts	Strategies & Approaches	Assessment
1. To understand the need and importance of research in general and educational research in particular 2. To realize the relevance of	• **Research**- meaning, characteristics, functions of research ,characteristics of a good researcher, Teacher as a researcher, need and importance of Educational research.	Lecture-discussion ICT enabled class wise discussion Collaborative	• Role Performance Analysis in group Discussion • Class test • Seminar Presentations

hypothesis formation and the skill to form different forms of hypothesis 3. To understand the nature of different types of research and their applications 4. To familiarize with various types of research and their applications 5. To get acquainted with planning and developing of action research 6. To understand how to carry out action researches and prepare the reports 7. To familiarize with planning and developing projects 8. To understand how to carry out Projects and prepare the reports	• **Hypothesis**- meaning, relevance/role/functions, forms of hypothesis-directional and non directional . **Types of research** (based on purpose only)- basic/fundamental research, applied research and action research. • **Action research**- Need, scope, characteristics, Steps involved:- Problem identification, Defining and Analyzing the problem, Formulating and Testing action hypotheses and Preparing the report - and Advantages and Limitations of action research, Integrating action research practices -need and scope, Preparation of Action research reports. • **Research Projects –** Definition of a project & Steps	interaction Group Discussion Critical evaluation of need for educational research Lectures Group discussion Meaningful verbal Discourse Lectures Group discussion Collaborative Interaction	• Analysis in group Discussion • Class test

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- Gardner, John(2012). Assessment and Learning -2nd edition. New Delhi: SAGE Publications India Pvt. Ltd.
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- Val, Klenowski.(2002). Developing Portfolios for Learning and Assessment: Processes and Principles. London. RoutledgeFalmer.
- Wyatt-Smith, Claire; Cumming, Joy (Eds.) (2009). Educational Assessment in the 21st Century. New Delhi: Springer.
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- www.springer.com/education+%26+language/journal/11092
- www.researchphilosophy.blogspot.com/
- www.katho3.people.wm.edu/

SEMESTER II

EDU-09.1: CURRICULUM AND RESOURCES IN A DIGITAL ERA : MALAYALAM EDUCATION

(Theoretical Discourse – 60 hours & CE – 30 hours)

Objectives

- C O 1To get acquainted with principles/concepts of curriculum construction, Kerala curriculum frameworks and different types of curriculum etc.
- C O 2 To understand the Methods, approaches, strategies of teaching Malayalam language and literature.
- C O 3To get familiarized with the e- resources for teaching/learning Malayalam.
- C O 4To incorporate e-resources in the pedagogic content knowledge analysis of Malayalam.
- C O 5To understand the basic theories/concepts/perspectives of language acquisition, Chomsky's conceptions on language, the whole language approach etc.

Contents :

Unit 1 : Curriculum design in Malayalam education

Unit 2 : Methods and strategies in Malayalam teaching

Unit 3 : E-Resources in teaching & learning of Malayalam

Unit 4 : Research inputs in language learning

Unit 1: Curriculum Design in Malayalam Education

Learning Outcome	Major Concepts	Strategies & Approaches	Assessment
To get acquainted with principles/concepts of curriculum construction, Kerala curriculum frameworks and different types of curriculum etc	• Definitions for 'Curriculum' • Principles of curriculum construction • Curriculum and Syllabus • Different types of curriculum • Kerala Curriculum Framework(KCF)	Open discussion on the suitability of present day school curriculum Preparation of an essay on general approach on language learning in National/Kerala curriculum frameworks	Participation in discussion/Relevance of ideas Essay CE – Practicum

Unit 2: Methods and Strategies in Malayalam Teaching

Learning Outcome	Major Concepts	Strategies & Approaches	Assessment
To understand the Methods, approaches, strategies of teaching Malayalam language and literature	• Lecture method • Project method • Play way method • Dramatization • Dalton Plan • Inductive and deductive methods • Role play • Problem solving method	Project Short essay Open discussion Comparative note Action research Seminar on the significance of new educational theories	Project paper Essay Participation in discussion Action research findings

Unit 3 : E-Resources in teaching & learning of Malayalam

Learning Outcome	Major Concepts	Strategies & Approaches	Assessment
To get familiarized with the e- resources for teaching/learning Malayalam To incorporate e-resources in the pedagogic content knowledge analysis of Malayalam	• Design and development of Malayalam blogs. • Major useful sites for teaching and learning Malayalam. • Use of Social Networking sites in teaching and learning Malayalam language and literature • Wikipedia – English and Malayalam • E- resources for teaching and learning Malayalam language and literature. • E- Books • E-content design and development Preparation of PPTs, documentaries, short films etc. • Tools, techniques and applications for video making and editing.	Familiarization session on applications/software/sites suitable for Malayalam teaching and learning Design and development of a blog for Malayalam class (group activity) Practicum	Participation of students innovative ideas

Unit 4 : Research inputs in language learning

Learning Outcome	Major Concepts	Strategies & Approaches	Assessment
To understand the basic theories/ concepts/ perspectives of language acquisition, Chomsky's conceptions on language, the whole language approach etc.	**Research contributions of Noam Chomsky to the field of language and cognitive psychology** • Language acquisition and language learning. • Language acquisition and cognitive development • Chomsky on language and thought • The parameters of LAD and Universal Grammar • The whole language approach	Seminar on conventional and new perspectives in learning language Preparation of short notes on LAD, universal Grammar Discussion on supplied reading materials.	Seminar paper/participation Student participation CE - Test

SEMESTER II

EDU-10.1: Techno Pedagogic Content Knowledge Analysis– MALAYALAM

(Theoretical Discourse – 60 hours & CE – 30 hours)

Objectives

- To get familiarized with the concept of Techno Pedagogic Content Knowledge Analysis.
- To understand the concepts relatedto integrated approach in teaching Malayalam.
- To understand concepts related to community based teaching and learning.
- To get acquainted with principles/concepts of teaching prose,poetry, grammar and composition.
- To understand the concept ‘models of teaching, and to practice various models.

Contents :

Unit 1 : Techno Pedagogic Content Knowledge analysis (TPCK)

Unit 2 : Community based teaching and learning of Malayalam

Unit 3 : Teaching of prose, poetry, grammar and composition

Unit 4 : Models of Teaching

Unit 1: Techno Pedagogic Content Knowledge analysis (TPCK)

Learning Outcome	Major Concepts	Strategies & Approaches	Assessment
To get familiarized with the concept ofTechno Pedagogic Content Knowledge Analysis To understand the concepts relatedto integrated approach in teaching Malayalam	• Need and significance • Effective use of technology in the transaction of content **Integrated Approach in Teaching Malayalam** • Significance • Different types • Interdisciplinary Approach • Stages of application • Integrated learning activities	Discussion on given reading materials Preparation of modules Group discussion	Participation in discussions Completeness and clarity CE – Test

Unit 2: Community based teaching and learning of Malayalam

Learning Outcome	Major Concepts	Strategies & Approaches	Assessment
To understand concepts related to community based teaching and learning	• Library – as a community resource centre ❖ Different types of School library- General/Class/Subject libraries ❖ Reading corner • Online libraries /publications/ book stores • Importance of agencies like Kerala Sahitya Academy, Kerala Bhasha Institute, Bala Sahithya Institute, Kerala Kalamandalam etc. • Major Malayalam book stores and publishers - Kerala Bhasha Institute, DC Books, NBS, Mathrubhoomi Books etc.	Assignments Preparation of short notes Seminar presentations	Assignment papers CE – Seminar Appropriateness of presentations, Variety and suitability

Unit 3 : Teaching of prose, poetry, grammar and composition

Learning Outcome	Major Concepts	Strategies & Approaches	Assessment
To get acquainted with principles/concepts of teaching prose, poetry, grammar and composition.	Teaching of, • Prose, • Poetry, • Grammar • Group activities, Grouping techniques • Learning aids for teaching Malayalam language and literature	Preparation of lesson plans Discussions on new trends in teaching prose. poetry and grammar.	Lesson plans CE - Practicum

Unit 4 : Models of Teaching

Learning Outcome	Major Concepts	Strategies & Approaches	Assessment
To understand the concept 'models of teaching' and to practice various models	• Basic concepts • Concept attainment model. • Role play model • Advance organizer model	Practical sessions based on varied models Demonstrations on models of teaching	Lesson plans Performance of the students CE - Subject Associated Activities

EDU - 09.2: Curriculum and Resources in Digital Era: English Education.

(Theoretical Discourses – 60 & CE – 30 hours)

Objectives :

- To familiarize with concepts related to Curriculum and Syllabus.
- To develop an understanding of the need and scope of
- school-community linkage.
- To identify and critique different types of Course Books.
- To explore possibilities of collaborative and cooperative learning.
- To sensitize with ways of engaging classes in inclusive settings.
- To evoke a need to regularly update research in the field of ELT

Contents:

Unit I **Curriculum Designing in English Education**
Unit II: **Community Based Teaching and Learning of English**
Unit III: **E-Resources in Teaching & Learning of English**
Unit IV: **Research Inputs in English Learning**

Unit I: Curriculum Designing in English Education (Duration :25 hrs)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. Familiarize student teacher with the principles of curriculum construction and organization 2. Grasp the relationship between curriculum and Syllabus	Principles of Curriculum construction and organization NCF 2005, 2009, KCF 2007 Critical Pedagogy Social constructivism Curriculum and Syllabus, Curriculum-Types Language Curriculum Philosophical and Sociological	Direct instruction Intro talk on the different Frame work available Verbal interaction Preparation of Check list and group	Evaluationof entry made in ReflectiveJournal

	perspectives, Psychological and Linguistic Foundations - Criteria for Selection of content - Course book, Sourcebook	analysis of CB	

Unit II: Community Based Teaching and Learning of English (Duration :20 hrs)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. Acquaint with teaching and learning resources available in formal and informal contexts	- Teaching and learning resources - Formal & Informal learning contexts - Role of Language Institutes and Local Library for learning English - Society as Language Lab – FilmTheatre - Literary clubs, Language forums - Interview and Talk by experts - - Inclusive Education- Concept, Need and significance; Ways of dealing with learners with LD/ Children with Special needs	Field visit Hands-on experience Group discussion Sharing of learning experience	- Surveying - Checklist - Presentation of Field visit reports

Unit III: E-Resources in Teaching & Learning of English (Duration :25 hrs)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To analyze instructional materials in print and digital form for effective transaction	Educational Websites Virtual Classrooms On line language games- vocabulary, grammar, spelling etc. E-Library E-resources for Prose Film adaptations - literature and social issues Audio podcasts Speeches Pronunciation and Conversation practice Online E-resources for Poems Critique of poems on websites Exploring text types Online Descriptive – Narrative-Expository-Argumentative Recitation	Presentation of specimen digital resources followed by critique on effectiveness Individual /Pair work Exploring online resources and preparing report	Performance evaluation Participant observation

Unit IV: Research Inputs in English Learning (Duration : 20 hrs)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To enable student teachers to promote student effort in learning	Research in English Language Education and Second Language Pedagogy Identifying and locating significant concerns related to language learning	Intro lecture Enquiry centred discussion	Style of presentation Performance Examine communicative competence

	Action Research Investigating any one learner issue Review of Recent Research Studies in English Language	Group tasks by assigning specific roles	

Reference

Books:

- Aggrawal, J.C. (2002). Educational Research –An Introduction.New Delhi, Arya Book Depot.
- Borg, Simon and Hugo Santiago Sanchez. (2015). InternationalPerspectives on Teacher Research. Palgrave.ISBN 9781137376206.
- Burns, Anne. (1999). Collaborative Action Research for EnglishLanguage Teachers. Cambridge University Press.
- Ellis,Rod. (2011). Language Teaching Research and LanguagePedagogy.Wiley-Blackwell ISBN: 978-1-4443-3610-8
- Howatt, A.(1984) A History Of English Language Teaching. Oxford University Press.

Journals:

- Interdisciplinary Strategies for English and Social Studie http://apcentral.collegeboard.com/apc/public/repository/ap04_preap_1_inter_st_35891.pdf
- Issue Theme: Interdisciplinary Synergy: Teaching and Learning in Collaboration. English Journal, Vol 103.No. 3 January 2014 http://www.ncte.org/journals/ej/issues/v103-3
- The sociology of language teaching and learning.Ravi Bhushan,Theory and Practice in Language Studies, Vol. 1, No. 3, pp. 309-311, March 2011.

Select Online resources:

- Characteristics of a virtual classroomhttp://www.learndash.com/characteristics-of-a-virtual-classroom/

Curriculum

- http://www.preservearticles.com/2012010920286/the-main-principles-of-curriculum-construction-may-be-mentioned-as-under.html
- http://www.differencebetween.info/difference-between-syllabus-and-curriculum

How to Critique Poetry

- http://www.wikihow.com/Critique-Poetry
- http://www.writingroom.com/viewwriting/wr_how_to/How-To-Critique-A-Poem
- Four Types of Writing: http://hunbbel-meer.hubpages.com/hub/Four-Types-of-Writing
- Free-ENGLISH.com: http://www.free-english.com/english/Home.aspx

Film adaptations

- Adaptation- novel to film: http://www.pbs.org/wgbh/masterpiece/learningresources/fic_adaptation.html
- Adaptation: From novel to film: http://d2buyft38glmwk.cloudfront.net/media/cms_page_media/11/FITC_Adaptation_1.pdf
- Masterpiece theatre: http://www.pbs.org/wgbh/masterpiece/learningresources/fic_about.html
- Inclusive education: http://nvpie.org/inclusive.html
- Internet TESL Journal, The*http://iteslj.org/*

Language forums

- http://www.usingenglish.com/forum/
- http://how-to-learn-any-language.com/forum/
- Learning Disabilities in the ESL Classroom: http://elt-connect.com/learning-disabilities-esl-classroom/

Online Language Games

- Games zone: http://www.english-online.org.uk/games/gamezone2.htm
- Quia: http://www.quia.com/pages/havefun.html
- Vocabulary games: http://www.vocabulary.co.il/

Mobile learning

- A beginner' s guide to mobile learning in ELT: http://englishagenda.britishcouncil.org/seminars/beginners-guide-mobile-learning-elt
- Mobile Learning in ELT: Survey 2013: http://nikpeachey.blogspot.in/2012/12/mobile-learning-in-elt-survey-2013.html
- Online forums: http://www.studentpulse.com/articles/414/3/using-online-forums-in-language-learning-and-education
- English Conversation Exercise - Trip to FL - American English Pronunciation: https://www.youtube.com/watch?v=4ogrBNpHPos

Pronunciation practice online

- 14 English pronunciation practice - ESL Spoken English lessons - Pronunciation common mistakes: https://www.youtube.com/watch?v=Xm2RIcGEVPw
- Pronunciation
- English Speaking Online: http://www.englishspeakingonline.com/
- Pronunciation tips: http://www.bbc.co.uk/worldservice/learningenglish/grammar/pron/
- Speaking & Pronunciation Practice: http://esl-writingtutor.com/practice/speaking-pronunciation.html

Podcasts

- Speaking skills for advanced learners of English: http://splendidspeaking.podomatic.com/
- The English we speak: http://www.bbc.co.uk/podcasts/series/tae
- Listen to English: http://www.listen-to-english.com/

ELT Research

- Action research: https://www.teachingenglish.org.uk/article/action-research
- Directory of UK ELT Research 2005-12: https://www.teachingenglish.org.uk/elt-research
- Nellie's English Projects: http://www.nelliemuller.com/Action_Research_Projects.htm

- The State of ELT Research in the UK: http://resig.weebly.com/uploads/8/1/4/0/8140071/panel_discussion_report_part_1_-- the_state_of_uk_elt_research.pdf
- Online research: http://tewt.org/index.php/research
- National Curriculum Framework 2005: http://www.ncert.nic.in/rightside/links/pdf/framework/english/nf2005.pdf
- The Speech Site: http://thespeechsite.com/en/index.shtml
- Tips on Reciting: http://www.poetryoutloud.org/poems-and-performance/tips-on-reciting
- 8 Current trends in teaching and learning EFL/ESL: http://blog.tesol.org/8-current-trends-in-teaching-and-learning-eflesl/

Useful sites

- Best Websites for teaching and learning 2014: http://www.ala.org/aasl/standards-guidelines/best-websites/2014
- Cambridge ELT: *http://uk.cambridge.org/elt/*
- CILT (Centre for Information on Language Teaching and Research) : http://www.cilt.org.uk/infos/index.htm

e-Library

- Hathi Trust's digital library: http://www.hathitrust.org/
- Open eBooks Directory: http://e-library.net/
- ProQuest eLibrary: http://www.proquest.com/products-services/elibrary.html **e-Resources for prose**
- Early English Prose Fiction (ProQuest): https://library.rice.edu/collections/eresources/early-english-prose-fiction-proquest
- e-Resources for poem: http://www.poetryfoundation.org/learning/resources
- New E-Resources: http://hul.harvard.edu/ois/news/2014/html/2014-12-01_1049_system.html
- Resources for English and American Literature: http://www.lib.cam.ac.uk/eresources/subjectresources.php?subjectId=36
- Education sites: http://www.topedusites.com/
- ESLflow : *http://www.eslflow.com/*
- Learn English Central (British Council): *http://www.learnenglish.org.uk/*
- One Stop English Magazine: http://www.onestopenglish.com/
- TEFL.NET : *http://www.tefl.net/index.html*

EDU - 10.2:Techno Pedagogic Content Knowledge Analysis: English

HOURS OF INTERACTIONS: 60 (Instructions) + 30(Activities/Processes) = 90 Hrs

Objectives

- **To familiarize with concept of teacher as a Techno-pedagogue.**
- **Identity ways of networking both for knowledge enrichment and instruction.**
- **Familiarize with the scope and possibilities of Models of teaching as an instructional design.**
- **Develops an awareness of global trends in English Language education.**

Contents

Unit I : TPCK and Self Instructional Strategies (Duration : 25 hrs)
Unit II: Networking in language learning (Duration :20 hrs)
Unit III: Models of Teaching in Language Practice (Duration :25 hrs)
Unit IV: Global Trends in English Language Education (Duration : 20 hrs)

Unit I :TPCK and Self Instructional Strategies (Duration : 25 hrs)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. Familiarizes with the concept of teacher as Techno-pedagogue 2. Identifies the inter-relationship between Content Knowledge, Pedagogic Knowledge and Technological Knowledge	- Techno-Pedagogy - Content Knowledge - Pedagogic Knowledge - Technology Knowledge - Teacher as a Techno-Pedagogue - Nature and scope of Self instructional Strategies - Programmed Instruction - Linear-Branching - Self Instructional modules - Computer Assisted Instruction(CAI) - Computer Based Instruction (CBI) - Computer Assisted Language Learning (CALL)	Comparison of same content available in different digital formats Group task to identify effectiveness of different digital content in realizing proposed learning objectives. Demonstration of teaching content with	- Preparation of computer-basedinstructional material

		computer as aid and exclusively using computer Pair and group work to prepare computer-based instructional materials	

Unit II: Networking in language learning (Duration :20 hrs)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. Familiarizes with ways of exploiting Internet resources for both knowledge enrichment and instruction 2. Develops necessary skills for transmission of information and content using websites	Networking: Teacher –Teacher; Teacher-Institution; Teacher-Student Forum , Wiki, Blog Video Conferencing Professional communities -English Teacher Blogs Teacher Tube ESL Café LinkedIn Content writing Copy Writing Outsourcing Transcription Learning Management System Scope Storage Collaboration	Introductory talk Demo in Smart Classroom Pair-share Collaborative tasks	Grouppresentation Monitoringof activitiesin virtual world CheckingPopularity on Web

Unit III: Models of Teaching in Language Practice (Duration :25 hrs)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. Familiarizes with Models of Teaching as an instructional design and identifies ways of employing them for teaching Prose, Poetry, Vocabulary and Grammar	*Dimensions of a Model- Syntax, Social System, Principles of Reaction, Support System Instructional and nurturant effects -Direct Instruction Model -Concept Attainment Model -Advance Organizer Model	Distribution of Specimen Lessons based on specific Models Group tasks for preparing lessons based on specific Models Assimilation and accommodation	Ability to transact the content/ realize objectives in the plans prepared Checkingeffectiveness of Lesson Plans based on specific Models for chosen content

Unit IV: Global Trends in English Language Education (Duration : 20 hrs)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. Familiarizes with global trends in Language education 2. Familiarizes with aspects related to translation 3. Gets an awareness of digital resources for Online tutoring	Exercises and pedagogic practices in countries where English is treated as L_1 Exercises and pedagogic practices in Asian countries as ESL Literary Translation as a language exercise. Journal Clubs – Review and discussion of studies and articles in Journals	Lecture-cum-discussion on different pedagogical practices. Close reading of literary texts followed by group translation	Prepares samples Peer evaluation Performance in tests

	Production of digital resources for Online tutoring	Comparison of articles in journals and magazines to identify form and style required for journal articles followed by critique of articles written by peers Critique of specimen digital resources followed by design and preparation of digital resources for Online tutoring	

References

Books:

- Lesley, Farrel (etal.) Eds.) **English Language Education in SouthAsia: From Policy to Pedagogy.** Cambridge University Press.
- Joyce, Bruce and Marsha Weil.(1972) **Models of Teaching**. Prentice Hall Inc. ; Englewood Cliffs.
- Lockwood, Fred. (1998). **The Design and Production ofSelf-instructional Materials**. Psychology Press.
- Sperling, Dave. (1997). **The Internet Guide for English LanguageTeachers** Prentice-Hall Regents. (1998 edition also available).
- Warschauer, Mark (etal.) (2000) **Internet for English Teaching** TESOL.

Journals:

- ***Information & Communication Technologies in ELT*** . Abdul Mahmoud Idrees, Ibrahim, Journal of Language Teaching and Research. Vol. 1, No. 3, pp. 211-214, May 2010 © 2010 Academy Publisher ISSN 1798-4769
- ***Models of Teaching: A solution to the teaching style/learning style dilemma.*** Susan S. EllisEducational Leadership. January 1979.P274-77.

Online references:

- ***CALL (computer assisted language learning):*** https://www.llas.ac.uk/resources/gpg/61
- ***Collaborating with Wikis:*** http://tewt.org/index.php/discussion-collaboration/wikis

- ***Content Based Instruction in EFL Contexts*.** Stephen Davies, :The Internet TESL Journal, Vol. IX, No. 2, February 2003. http://iteslj.org/Articles/Davies-CBI.html
- ***Critical ELT Practices in Asia Key Issues, Practices, and Possibilities***.: Kiwan Sung and Rod Pederson (Eds.) Transgressions: Cultural Studies and Education Volume 82. Sense Publishers https://www.sensepublishers.com/media/209-critical-elt-practices-in-asia.pdf
- ***Educational Blogging:*** http://tewt.org/index.php/discussion-collaboration/blogs
- ***E-tivities with a Wiki: Innovative Teaching of English as a Foreign Language:*** http://eunis.dk/papers/p87.pdf
- ***How to Write and Publish an Academic Research Paper:***

  http://www.journalprep.com/FILES/How_to_Write_and_Publish_an_Academic_Research_Paper.pdf

Online reading material

- http://www.gutenberg.org/wiki/Main_Page
- http://onlinebooks.library.upenn.edu/archives.html

Online tutoring platforms

- https://buddyschool.com/
- http://www.tutorvista.co.in/index.php
- https://www.smarthinking.com/services-and-subjects/services/live-online-tutoring/

- ***Rubrics for Web Lessons:*** http://webquest.sdsu.edu/rubrics/weblessons.htm
- ***Select Podcasting Sites:*** English as a Second Language Podcast: http://www.eslpod.com</p>
- ***Specimen Linear Programme for teaching Grammar:*** http://programmedinstruction.tiddlyspot.com/#Nouns-17
- ***Teaching English in the Digital Age:*** http://digitalenglish.weebly.com/
- ***Translation activities in the language classroom:*** https://www.teachingenglish.org.uk/article/translation-activities-language-classroom
- ***Using computers in language teaching:*** http://esl.fis.edu/teachers/support/teach.htm
- ***Using Videoconferencing to Facilitate Various Perspectiveson the Teaching and Learning Process*** Farren, M. (2002) http://www.computing.dcu.ie/~mfarren/perspectives.htm

What is technological pedagogical content knowledge?: Koehler, M. J., & Mishra, P. (2009),Contemporary Issues in Technology

- and Teacher Education.***9***(1), 60-70.http://www.citejournal.org/articles/v9i1general1.pdf
- ***Writing a journal article review:*** https://academicskills.anu.edu.au/resources/handouts/writing-journal-article-review
- ***12 Content-writing secrets of professional writerThe Advanced Content Marketing Guide***. Neil Patel andKathryn Aragon. http://www.quicksprout.com/the-advanced-guide-to-content-marketing-chapter-5/

EDU - 09.3. : CURRICULUM AND RESOURCES IN DIGITAL ERA: HINDI EDUCATION

HOURS OF INTERACTIONS: 60 (Theoretical Discourses) + 30(Activities/Processes) = 90 Hrs

Course Outcome (CO):

- CO 1 To be conversant with modern principles and trends in the construction and transaction of Hindi curriculum
- CO 2 To develop experience to systematically correlate instructional practices with the community
- CO 3 To attain proficiency in transacting the Hindi curriculum from a digital migrant outlook
- CO 4 To generate a broad perspectives of e-resources in instructional practices and to develop skill in retrieving and transacting Hindi curriculum through e-resources
- CO 5To develop a positive attitude towards research to develop inquiry skills and scientific investigation

CONTENTS :

Unit 1 Curriculum Designing in Hindi Education

Unit 2 School and Community Based Instructional Resources in Teaching Hindi

Unit 3 E-Resources in Teaching and Learning of Hindi

Unit 4 Research Trends in Hindi Education

Unit 1: Curriculum Designing in Hindi Education (16 Hours + 7 Hours)

Course Specific Outcome (CSO)	Major concepts	Strategies & Approaches	Assessment
1. Get acquaint with the modern principles and trends in curriculum construction and designing of instructional materials for curriculum transaction	□ Curriculum – Concepts and principles of curriculum construction □ Approaches, types of curriculum □ Curriculum and Syllabus. □ Preparation and designing of curriculum transaction material for Hindi language instruction: Designing of student-teacher generated Digital texts, adapting free downloadable digital resource in Hindi, Familiarising with the use of basic tools and software in Hindi -Google transliteration (for Hindi typing), Hindi online dictionaries –	Analytical approach Seminar Lecture Co-operative learning Workshop Library works Utilisation of web resources	□ Group investigation summary reports □ Authenticating the trustworthiness of the networking resources – by peers and mentor

	www.shabdkosh.com, Collection of Hindi sites - http://dir.hinkhoj.com , Searching Wikis for collecting materials for classroom instruction		

Unit 2 : School and Community Based Instructional Resources in Teaching Hindi (18 Hrs + 7 Hrs)

Course Specific Outcome (CSO)	Major concepts	Strategies & Approaches	Assessment
1. Develop a desire to take active involvement in social and community affairs and develop skills in public relation 2. Acquaint with teaching and learning resources available in formal and informal contexts 3. Equip to systematically correlate instructional practices with the society	□ School and community based instructional resources, school to the community and community to the school, social and community involvement activities □ Formal and Informal learning contexts □ Role of PTA. MPTA □ Society as language lab: Film, Theatre	Discussion Field visit Hands-on experience Project method Visit to institutions	□ Prepare a list of community resources- discuss and present the ways to utilize the community resources □ Report on field study □ Surveying

	□ Field visit, visit to central Govt institutions, interaction with native Hindi speakers, visiting institutions that promote Hindi language namely Kerala Hindi Pracharsabha, Dakshin Bharat Hindi Prachar Sabha, Regional Hindi Directorates etc., visit to SCERT, NCERT □ Organizing co-curricular activities: language forums, Hindi literary clubs and day celebrations □ Need and importance of library in Hindi education, developing library skills		

Unit 3: E-Resources in Teaching and Learning of Hindi (12 Hrs + 8 Hrs)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. Analyze Hindi e-resources in instructional practices 2. Familiarize with on- line resources, softwares and social networking 3. Explore and practice infotainment	• E-resources: utilization of e- resources, web resources, need for Hindi e-resource pooling and development of e-portfolio, M-learning as a pervasive method for effective Hindi instruction,e-learning,web based learning • Learning management system (LMS) in teaching learning of Hindi education • Formation of Hindi Net groups/online communities, e-content in Hindi for enhancing students language attainment- social networking, developing Blogs and posts in blogs, e-journals, pod casting, IT enabled instructional resources: On line resources, videos, YouTube , animations, film clippings, online Hindi lessons	Online learning Demonstration Individual/ group work Web search	• Assessing the preparation of e-learning material • Preparing report on online resources

Unit 4 Research Trends in Hindi Education (14 Hrs+ 8 Hrs)

Course Specific Outcome (CSO)	Major concepts	Strategies & Approaches	Assessment
1. Grasp the need and scope of research in Hindi instruction 2. Develop research aptitude, and inquiry skills	□ An introduction to Research in Education- Need and scope of research in teaching-learning Hindi, need for developing innovative techniques and strategies □ Hindi teacher as a researcher □ Analysis of Research outcomes in Hindi education with respect to teaching and learning □ Action Research	Group Discussion Prepare a note/paper (utilizing internet) on the latest research findings on pedagogical aspects in Hindi Group Seminar Action Research Project	□ Evaluation of seminar presentation skill □ Performance assessment □ Examine communicative competence

EDU- 10. 3 : TECHNO PEDAGOGIC CONTENT KNOWLEDGE ANALYSIS – HINDI

HOURS OF INTERACTIONS: 60(Theoretical Discourses) + 30 (Activities/Processes) = 90 Hrs

COURSE OUTCOME (CO):

- CO 1 To prepare the prospective teachers to be techno- pedagogue and become aware of the concept TPCK
- CO 2 To develop the skill of inculcating technology assisted Hindi learning
- CO 3 To familiarize with the networking system for institutional and professional growth
- CO 4 To empower in surfing digital resources for Hindi instruction
- CO 5 To get acquainted with the importance of learning Hindi in a global perspective.

Contents :

Unit 1 Techno Pedagogic Content Knowledge Analysis (TPCK) and Self Instructional Strategies

Unit 2 Networking in Hindi Learning

Unit 3 Models of Teaching in Hindi

Unit 4 Global Trends in Education

Unit 1 Techno Pedagogic Content Knowledge Analysis (TPCK) and Self Instructional Strategies

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. Acquire the concept of teacher as techno- pedagogue and become aware of the concept TPCKA 2. Become conversant with technology enhanced learning 3. Get acquainted with the self instructional strategies and need of creating e-mail and blogs for pedagogical analysis	Inter relationship between Technology, Pedagogy and Content, Teacher as Techno-Pedagogue Scope of Techno-Pedagogic Content Knowledge Analysis TPCK based content analysis of text books in Hindi from std V11 to X11 Collections of links to websites in Hindi, e-Newspapers and e-journals . Self instructional Strategies ; Digital Portfolio , Online Collaboration , use of Multimedia , Webportal , E- Learning , Technology integrated problem solving learning , Computer assisted learning Packages ,	TPCK based content analysis through peer discussion and teacher intervention Demonstration On line and off line learning Group discussion Power point presentation	Prepare a self explanatory note on 'Teacher as a Techno-Pedagogue' Document analysis

	Preparation of self instructional Modules , Creation of Email ID and Blogs , preparation of powerpoint presentation Internet as a Research and Communication Tool , Using search Engine , Chatrooms Blogs to encourage peer interaction / expert consultation /Collaboration Projects		

Unit 2 Networking in Hindi Learning

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. Develop the ability to acquaint with the various modes of networking for effective language instruction 2. Equip to generate avenues for networking as a means to enhance Hindi language learning	□ e-twinning □ Online learning: concept and system of online learning, virtual learning, creating social online groups for promoting teaching-learning of Hindi, Hindi language translation sites and softwares-Translation Buddy.com/Hindi □ Applications of Social Networking systems, online reflection using blogs, online forums and Hindi communities, communication	Utilising e-learning resources Virtual tour to digital learning platforms Downloading / pooling competency enhancement packages/ resources Workshop Postings in blogs	□ Performance assessment and feedback □ Evaluation of Online Assignments

	sites, preparation of online notes □ Awareness of student safety on the Internet, Copyright Issues and International Copyright laws regarding computer technology and Internet		

Unit 3 Models of Teaching

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. Familiarizes with different types of Models of Teaching as an instructional design	□ Models of Teaching – Introduction and definition, dimensions of a model, classification of models ,types and families □ Designing of effective Models for Hindi language learning – Concept Attainment Model, Inductive –	Demonstration of models of teaching Preparation of lessons based on models of teaching	□ Experience sharing □ Assessment of lesson plans □ using different models of teaching □ Peer assessment □ Examine the level

	Deductive Thinking Model, Advance Organizer Model, Synectics Model – theory and classroom practices, preparation of lesson templates for each model	Simulation	of participation

Unit 4 Global Trends in Hindi Education

Learning Outcome	**Major concepts**	**Strategies & Approaches**	**Assessment**
1. Familiarizes with global trends in language education 2. Analyze the scope of Hindi language in the global context	□ Importance of Hindi as link language in the global context □ Hindi education and job opportunities in the global context □ Global trends in Hindi education □ Hindi language education in India and Gulf countries	□ Discussion □ Brain storming □ Problem solving □ Concept maps □ Online learning □ Assignment □ Report	□ Presentation □ Assessment of assignment/report

SEMESTER II EDU: 0.9. 4

CURRICULUM AND RESOURCES IN A DIGITAL ERA: SANSKRIT EDUCATION[60HOURS+30HOURS]

COURSE OUTCOME(CO):

CO 1 To understand and analyse the curriculum and text books of Sanskrit from std 7-12 prepared by SCERT based on the theoretical principles of curriculum construction.

CO 2 To identify and to understand the Community based teaching learning resources in Sanskrit.

CO 3 To familiarize and practice e-resources in teaching and learning of Sanskrit.

CO 4 To conduct action researches based on classroom practices.

CONTENTS

UNIT -1 CURRICULUM DESIGNING IN SANSKRIT EDUCATION

UNIT II- COMMUNITY BASED TEACHING AND LEARNING OF SANSKRIT

UNIT III- E- RESOURCES IN TEACHING AND LEARNING OF SANSKRIT

UNIT IV- RESEARCH INPUT IN SANSKRIT LEARNING

UNIT-1 CURRICULUM DESIGNING IN SANSKRIT EDUCATION[15HOURS+6HOURS]

Course Specific Outcome (CSO)	CONTENT	STRATEGIES/APPROACHES	ASSESMENT AND EVALUATION
To understand and analyse the curriculum and text books of Sanskrit from std 7-12 prepared by SCERT based on the theoretical principles of curriculum construction.	Principles of Curriculum construction and organization- General principles of curriculum construction.-Concentric and spiral approaches. Psychological and logical approaches.Modern trends in curriculum. Review of NCF2005,2009,KCF 2007, Theoretical base of kerala Curriculum framework.- critical pedagogy, issue based – curriculum-social constructivism-Outcome based Learning. curriculum- and Syllabus -Curriculum-Types -Importance of Curriculum-Present position of Sanskrit in school Curriculum. Approach to language syllabus design-First language –second language- issue based Inclusion of classical and vedic literature-treatment of grammar alenkara and vretta. Time allotted to various stages -. Critical study of Sanskrit syllabus.	Discussion. Lecture method. Meaningful verbal expression. Review. Presentation. Brain storming.	Optional level focused group discussion. -Participant observation- Observation. Examine the level of participation

		Discussion lessons-Designing templates and recording-5-and models of teaching-3 out of 5.-15 marks. Demonstration [observation and recording]-2. Criticism-performance,observation,and recording-5 and models of teaching-3 out of 5. Critical analysis.	Participant observation. Participation. Observation. Observation and Criticism. *Test-5Marks.

UNIT- II: COMMUNITY BASED TEACHING AND LEARNING OF SANSKRIT[13HOURS+7HOURS]

Course Specific Outcome	CONTENT	STRATEGIES/APPROACHES	ASSESMENT AND
(CSO)			EVALUATION
To identify and to understand the Community based teaching learning resources in Sanskrit.	Teaching and Learning resources. School, Library,Literary clubs, Language lab,Community-Formal and Informal Learning. Role of Language Institutes and Local Library for Learning Sanskrit. Soceity as Language Lab. –Film Theatre- Language Forums-Interview and talks by experts. Exposure to events of national importance.Samskritotsava-Sanskrit day celebrations-Observation of kalidasa and vyasajayanthi.Visit to various historical places and importyance of sanskrit - archeology museum , mural paintings, sanskrit universities, kalamandalams,panmanaasramam, Rashtreeyasamskritasamstanpuranattukara etc. Inclusive Education-Concept, Need and Significance, Ways of dealing with learners with LD/Children with special needs.	Discussion. School induction programme. Buzz session. Mind mapping. Presentation.	Role performance. Based on report and participant observation. Participant observation. Analysis and mapping. Observation. Analysis the group discussion.

		Narrative expression session in small or medium groups. Community living camps. Visits. Interview.	Participant observation. *Practicum-10 Marks.

UNIT-III-E-RESOURCES IN TEACHING AND LEARNING OF SANSKRIT[18HOURS+10HOURS]

Course Specific Outcome (CSO)	CONTENT	STRATEGIES/APPROACHES	ASSESMENT AND EVALUATION
To familiarize and practice e-resources in teaching and learning of Sanskrit.	Definition-Identification of e-resources. M-Learning in SLT-Sanskrit related Websites.—Virtual Classrooms- E-Library. E-Resources for Prose and Poems.	Demonstration and lecturing. Assaigments for preparing lessonplans based on E resources. Meaning full verbal expression.	Observation.

		Video script-Developing, enacting, recording and uploading-1- 10 marks. Or ICT based Lesson designing and uploading in Blog-1 Presentation.	Participant observation. Role performance. Participant observation.

UNIT IV- RESEARCH INPUTS IN SANSKRIT LEARNING[14 HOURS+7HOURS]

Course Specific Outcome (CSO)	CONTENT	STRATEGIES/APPROACHES	ASSESSMENT AND EVALUATION
To Conduct action researches based on classroom practices.	The importance of Research-Scope-Identifying and locating significant concerns related to the learning of the Sanskrit language learning-Action Research- Meaning and scope of action research.Investigating any one learner issue-Review of recent Research studies in Sanskrit language. Current trends.	Lecture cum discussion. Demonstration. Lecture method. Group discussion. Data collection .Preparation of tools. Report writing. Document analysis and Presentation.	Observation. Written test. Valuation of reports. Role performance. Evaluation of daily reflective journals. Participant observation. *Seminar/Presentation.-5-Marks.

1.Practicum-1 =5Marks

2.Seminar/Presentation-1=5Marks

3.Reading and Reflecting on any text=10Marks

4.Mid Semester Exam=5Marks.

SEMESTER II EDU-10. 4 :
TECHNO PEDAGOGIC CONTENT KNOWLEDGE ANALYSIS :SANSKRIT[60HOURS+30HOURS]

COURSE OUTCOME(CO):

CO 1 To develop teacher as a Techno- pedagogue

CO 2 To practice networking activities and related resources

CO 3 To practice networking activities and related resources

CO 4 To understand the Global trends in Sa nskrit Education.

CONTENTS

UNIT-I TPCK AND SELF INSTRUCTIONAL STRATEGIES.

UNIT-II NET WORKING IN LANGUAGE LEARNING.

UNIT-III MODELS OF TEACHING IN LANGUAGE PRACTICE.

UNIT IV GLOBAL TRENDS IN SANSKRIT LANGUAGE EDUCATION.

UNIT I TPCK AND SELF INSTRUCTIONAL STRATEGIES.[15HOURS+8HOURS]

Course Specific Outcome (CSO)	CONTENT	STRATEGIES/APPROACHES	ASSESMENT AND EVALUATI
To develop teacher as a Techno-pedagogue.	Techno-Pedagogy, Content knowledge, Pedagogic Knowledge, Technological Knowledge-Teacher as a Techno-Pedagogue, Nature and scope of self instructional strategies. Programmed instruction-Linear-Branching-Self instructional Modules- Computer Assisted instruction CAI-Computer based instruction CBI-Computer Assisted Language Learning CALL.	Lecture cum Demonstration. ICT based Lesson Template. Group discussions. Preparation of programmed instructional materials. Presentation. School induction programe for one week.-15 marks. Observation of model lessons-2 nos-and reporting during school induction-10 marks.	Participant observation. Discussion and Participant observation. Analysis the role performance. Performance. Role performance. *Test- 5 Marks.

UNIT II NETWORKING IN LANGUAGE LEARNING[13HOURS+7HOURS]

Course Specific Outcome (CSO)	CONTENT	STRATEGIES/APPROACHES	ASSESMENT AND EVALUATION
To practice networking activities and related resources.	Net Working:-Teacher-Teacher; Teacher-Institution; Teacher-Student. Forum-Wiki-Blog-Video Conferencing. Professional Communities-Sanskrit teacher Blogs-Teacher Tube--. Content Writing-Copy Writing-Out sourcing-Transcription. Learning Management system-Scope-Storage-Collaboration.	Lecturing and Demonstration.Group discussion about the possibilities of Net working in language learning. Presentation.	Observation. Role performance. Participant observation. Performance. *Association activity-5Marks.

UNIT III MODELS OF TEACHING IN LANGUAGE PRACTICE.[18HOURS+8HOURS]

Course Specific Outcome (CSO)	CONTENT	STRATEGIES/APPROACHES	ASSESMENT AND EVALUATION
To prepare different types of Models of Teaching.	Dimension of a Model-Syntax, Social System, Principles of Reaction, Support system, Instructional and Nurturant effects. . Concept attaintment model, Enquiry Training Model, Advance Organizer Model, Synectics Model, Role play Model .	Lecture cum Demonstration. Group discussion. Narrative expression. Lesson plan and demonstration class. Criticism Lessons. Presentation.	Observation. Role performance. Participant observation. Role performance Performance observation and recordings. Performance.

UNIT IV GLOBAL TRENDS IN SANSKRIT LANGUAGE EDUCATION[14HOURS+7HOURS]

Course Specific Outcome (CSO)	CONTENT	STRATEGIES/APPROACHES	ASSESMENT AND EVALUATION
To understand the Global trends in Sa nskrit Education.	Global trends-Its Meaning-Scope-Significance. Learning of Sanskrit in different Countries-Switzerland, Germany Austreliya, Arjentina, Britain, Thailand, United States, France, Japan, Nepal . Curriculum of Sanskrit in different Countries [-School-Higher Education-Research. Non formal way of Learning Sanskrit in these countries-Spiritual learning in schools.Practice of Yogasanas, Pranayama , Dhyana etc.Influvence of Sanskrit literature on spirituality and existing spiritual practices like Art of living,IshaYoga,Sahajamargam ,Reiki etc.Daily reading of Ramayana,Bhagavadgita,Bhagavata .Stotrautras.Daily prayers of all religions. Spiritual leaders contribution to Sanskrit-Chattambiswamikal,Sivagiri,sreenarayanaguru,sankaracharya. Swami Vivekananda.	Demonstration. Group discussion. References/Internet. Collect resources.	Observation. Role performance. Individual assessment. Presentation.

	Influence of Sanskrit to various cultures-Thailand,Indonesia,etc. Comparative Education asa new Subject-Comparison with other languages[English ,Malayalam ,Hindi] Contribution of Sanskrit other deciplines, Medicine, Ayurveda, Music, Agriculture,Law etc.	Collection of knowledge. Group Discussion. Collect resources. Discussions. Meaning full verbal expressions Presentation.	Presentation. Participant observation. Assignment. Role performance. Peer instruction. Performance. Practicals-10- Marks.

Continuous Evaluation (CE)

1.Practical-1=5Marks

2.Test-Mid semester=5Marks

3.Subject association activity=5Marks

4.Group Practicum (Video scripting,recording and uploading)=10marks

EDU.09.5 : CURRICULUM AND RESOURCES IN DIGITAL ERA – ARABIC EDUCATION

[Transactional hours -60+ CE – 30 hours]

COURSE OUTCOME(CO):

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

- CO 1 Familiarize with the principles of curriculum construction andorganization
- CO 2 Acquaint with teaching and learning resources available in the formal and informalcontexts
- CO 3 Developtheabilitytoprepareinstructionalmaterialsinvariousformsforeffectivetransaction
- CO 4 Explore and practice infotainment activities inlanguage
- CO 5 Enable to promote student effort inlearning
- CO 6 Equip to manage diverse learner needs in languageclasses
- CO 7 DevelopinterestininnovativepracticesinthefieldofArabicLanguageTeachingandlearning

Contents

UNITI: ***CURRICULUM DESIGNING IN ARABIC LANGUAGE EDUCATION***

UNITII: **COMMUNITY BASEDTEACHING & LEARNING OF ARABIC LANGUAGE**

UNITIII: **E-RESOURCES IN TEACHING & LEARNING OF ARABIC LANGUAGE**

UNITIV: **RESEARCH INPUTS IN ARABIC LANGUAGE LEARNING**

UNIT I: CURRICULUM DESIGNING IN ARABIC LANGUAGE EDUCATION

Course Specific Outcome (CSO)	Major concepts	Strategies &Approaches	Assessment
1. Familiarizes with the principles of curriculum construction and organization 2. Acquaints with various trends in modern language curriculum	• Curriculum:Meaning,Definition& Principles • Approaches to curriculumconstruction • Curriculumandsyllabus,Typesof Curriculum, languagecurriculum • Criteria for selecting curriculumcontent • Modern Trends in CurriculumConstruction: • Life Centered- Learner Centered,-Activity Centered, Issue Based. • NCF(2005),KCF(2007) AcriticalreviewofArabicCurriculumof state schools ofKerala	Introductory Lecture Discussion Group Discussion Observation Narration	• CE • Assignments • Discussionreports • Debate • Classtest • TE

UNIT II: COMMUNITY BASED TEACHING & LEARNING OF ARABIC LANGUAGE

Course Specific Outcome (CSO)	Major concepts	Strategies &Approaches	Assessment
1. Acquaints with teaching and learningresourcesavailableinthe formal and informalcontexts 2. Develops the skill of applying community based learning resourcesinteachingandlearning	• CommunityBasedTeachingandLearning Resources: Formal & Informal learning contexts • Role of University Departments, Arabic Colleges,Darssystem,Religiousmadrasas • Society as LanguageLab • Language forums,; Celebration ofInternationalArabic Day	Introductory Lecture Discussion Group Discussion Observation Narration	• CE • Observation • Discussionreport • Assignments • TE

UNITIII: E-RESOURCES IN TEACHING & LEARNING OF ARABIC LANGUAGE

Course Specific Outcome (CSO)	Major concepts	Strategies& Approaches	Assessment
1. Exploresandpracticeinfotainment activities in languageteaching 2. Developsinterestininnovative practices in thefield of Arabic Language Teaching and learning	• E-learningandEteaching: • Digitaltextbooks/E-book,Digitallibrary& other onlineresources • DesigningofDigitaltextbooks,e-booksand its application • Adoptingdownloadedresourcesfor teachingArabic • M-learning:SmartphonesasLearning Devices and itsscope	Introductory Lecture Discussion Group Discussion Observation Narration	• TE

UNIT IV: RESEARCH INPUTS IN ARABIC LANGUAGE LEARNING

Course Specific Outcome (CSO)	Major concepts	Strategies &Approaches	Assessment
1. To review and disseminate the recent researches in the field of Arabic language 2. Equips to manage diverse learner needs by conducting actions Research in Arabic Language Education	• ResearchesinArabicLanguageEducation and Second LanguagePedagogy • Identifyingandlocatingsignificantconcerns related to Arabic languagelearning • ActionResearch–Investigatinglearnerissues • ReviewofRecentResearchStudiesinArabic LanguageEducation • Place of Arabic language as a sourceof knowledge	Introductory Lecture Discussion Group Discussion Observation Narration	• CE • Reports • Assignments • TE

References:

- ThatweeruAdai-alMuallim;kifayathuthaaleemwathahleelalmuthawasila:HashimUwaidha,DarallImalMalayeen,Labanan
- Thaaleemuallughaal arabiyyabainanadriyyawathathbeeq:DrHasanAlShahatha, Dar Misriyyawallubnaniya
- ThareeqathuThadreesiWastrateejiyyathuhu:DrMuhammedMahmmodalHaila, Dar AlKitabAlJamia,Alain,UAE
- ThaaleemallughaalArabiyalighairialnathiqeenabiha:MakthabaltharbiyyaalArabiliduwalalKhaleej
- ThuruquthadreesallughaalArabiyyalilmadarisalmuthawassithawathanaiyya:HasanMullaUthman;DaralamalKuthublithbaawannashshrwathouzeea, Riyadh,KSA
- ThaqnolojiyaalThaaleem;Alwasailalthaaleemiyyawathaqniyyathalthaaluum:Dr.MuhammedAssamTharbay,DarHammurabililnashriwathouzeea
- AsaleebWaThuruqual-ThadreesalHadeesa:Dr.MuhammedAssamTharbaya;DarHammurabililnashriwathouzeea
- Providing teachers effective strategies for using technology techtrends: Brown B&Henscheid
- The systematic Design for Instruction: Dick,W&L(1990)

EDU.10.5 : TECHNO- PEDAGOGIC CONTENT KNOWLEDGE ANALYSIS – ARABIC

(Theoretical Discourses - 60 hours& CE – 30 hours)

COURSE OUTCOME (CO):

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

- CO 1 Develop an understanding of techno- pedagogy and itsprinciples
- CO 2 Familiarize with the ways and importance of networking for professional and institutionalgrowth
- CO 3 Develop the ability and acquires the teaching skills by practicing complex skills of classroomteaching
- CO 4 Develop the skill of enhancing web based resources inteaching
- CO 5 Familiarizewithbasicconceptofmodelsof teachingandapplyinclassroomteaching
- CO 6 Acquire the ability to design lesson templates based on selected Models ofteaching
- CO 7 Familiarize with the global trends and developments in pedagogic practices of Arabic languageEducation

Contents

UNITI: TPCK AND SELF INSTUCTIONAL STRATEGIES

UNITII: NETWORKINGIN ARABIC LANGUAGE LEARNING

UNITIII: MODELS OF TEACHING IN PRACTICE

UNITIV: GLOBAL TRENDS IN ARABIC LANGUAGE EDUCATION

UNIT I: TPCK AND SELF INSTUCTIONAL STRATEGIES

Course Specific Outcome (CSO)	Major concepts	Strategies &Approaches	Assessment
1. Develop an understanding of Techno- pedagogic content knowledge Analysis 2. Develops the ability and acquires the teaching skills by practicing complex skills of classroom teaching	• Techno Pedagogic Content Knowledge Analysis(TCPKA) • InterrelationshipofContentKnowledge, PedagogicalKnowledge&Technological Knowledge • ScopeandchallengesofTPCKAinArabic languageTeaching • Teacher as a TechnoPedagogue • Knowledge generation/production • Use of web based resources ofTPCK • TPCKbasedcontentAnalysisofselected units of TB of Secondaryschools • ProgrammedInstructionandSelf instructionalmodules	Introductory Lecture Discussion Group Discussion Observation Narration	• CE • Report • Workshop-products • TE

UNIT II: NETWORKING IN ARABIC LANGUAGE LEARNING

Course Specific Outcome (CSO)	Major concepts	Strategies &Approaches	Assessment
1. Familiarize with the ways and importance of networking for professional and individual growth	• Networking in Teaching andlearning • Networking for professionalgrowth • Forming forum of onlinelearning: • Emails,blogs,teachertube,forprom oting teaching and learning ofArabic	Introductory Lecture Discussion Group Discussion Observation Narration	• CE • Observation • Online-Assignments • TE

UNIT III: MODELS OF TEACHING IN PRACTICE

Course Specific Outcome (CSO)	Major concepts	Strategies &Approaches	Assessment
1. Familiarize with basic concept of models of teaching, ways of employing in teaching 2. Acquire the ability to design lesson templates based of selected models and apply in classroom teaching	Models of Teaching: Basic Concepts and Properties: Syntax, Social System, support system, principles of reaction ,Instructional & nurturing effects • Designsbasedonselectedmodelsof teaching: • ConceptAttainmentModel,Advance Organizer Model .	Introductory Lecture Discussion Group Discussion Observation Narration	CE Assignments Discussion report TE

UNIT IV: GLOBAL TRENDS IN ARABIC LANGUAGE EDUCATION

Course Specific Outcome (CSO)	Major concepts	Strategies& Approaches	Assessment
1. Familiarizes with the global trends and developments in pedagogic practices of Arabic language education	• PositionofArabicLanguageinthe Modern World • Arabic language education inKerala • PedagogicpracticesofArabicLanguage in speaking / non speakingcountries • Critical Analysis of teaching and learningofArabicLanguageinKerala	Introductory Lecture Discussion Group Discussion Observation Narration	• CE • Discussion • Seminarreports • TE

References:

- Models of Teaching: Bruce Joyce & Marshaweil
- ThareeqathuThadreesiWastrateejiyyathuhu:DrMuhammedMahmmodalHaila, Dar AlKitabAlJamia,Alain,UAE
- Al Mawajjah Al FanniLi Mudarirsee al Lughal Al Arabiyya: Abdul Aleem Ibrahim; Dar al maarif, Alqahira
- ThaaleemallughaalArabiyalighairialnathiqeenabiha:MakthabaltharbiyyaalArabiliduwalalKhaleej
- ThuruquthadreesallughaalArabiyyalilmadarisalmuthawassithawathanaiyya:HasanMullaUthman;DaralamalKuthublithbaawannashshrwathouzeea, Riyadh,KSA
- ThaqnolojiyaalThaaleem;Alwasailalthaaleemiyyawathaqniyyathalthaaluum:Dr.MuhammedAssamTharbay,DarHammurabililnashriwathouzeA

EDU- 09.6 : CURRICULUM AND RESOURCES IN DIGITAL ERA: TAMIL EDUCATION

(Theoretical Discourses – 60 & CE – 30 hours)

Course Outcome :

- To familiarize with concepts related to Curriculum and Syllabus.
- To develop an understanding of the need and scope of
- school-community linkage.
- To identify and critique different types of Course Books.
- To explore possibilities of collaborative and cooperative learning.
- To sensitize with ways of engaging classes in inclusive settings.
- To evoke a need to regularly update research in the field of TLT

Contents

Unit I Curriculum Designing in Tamil Education
Unit II: Community Based Teaching and Learning of Tamil
Unit III: E-Resources in Teaching & Learning of Tamil
Unit IV: Research Inputs in Tamil Learning

Unit I: Curriculum Designing in Tamil Education (25 hours)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. Familiarize student teacher with the principles of curriculum construction and organization 2. Grasp the relationship between curriculum and Syllabus	• Principles of Curriculum construction and organization • NCF 2005, 2009, KCF 2007 • Critical Pedagogy • Issue-based curriculum • Social constructivism • Curriculum and Syllabus, Curriculum-Types • Language Curriculum • Philosophical and Sociological perspectives, Psychological and Linguistic Foundations • Criteria for Selection of content • Course book, Sourcebook	Direct instruction Intro talk on the different Frame work available Verbal interaction Preparation of Check list and group analysis of CB	• Evaluation • of entry made • in Reflective • Journal

Unit II: Community Based Teaching and Learning of Tamil (20 hours)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
3. Acquaint with teaching and learning resources available in formal and informal contexts	• Teaching and learning resources • Formal & Informal learning contexts • Role of Language Institutes and Local Library for learning Tamil • Society as Language Lab - Film	Field visit Hands-on experience	• Surveying • Checklist • Presentation of Field visit reports

	• Theatre • Literary clubs, Language forums • Interview and Talk by experts • Exposure to events of national importance • Inclusive Education- Concept, Need and significance; Ways of dealing with learners with LD/ Children with Special needs	Group discussion Sharing of learning experience	

Unit III: E-Resources in Teaching & Learning of Tamil (25 hours)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
4. To analyze instructional materials in print and digital form for effective transaction 5. To explore and practice infotainment activities in language	• Educational Websites • Tamil Virtual University • Virtual Classrooms • Online language games- vocabulary, grammar, spelling etc. • E-Library • E-resources for Prose • Film adaptations - literature and social issues • Audio podcasts • Speeches • E-resources for Poems • Critique of poems on websites Recitation	Presentation of specimen digital resources followed by critique on effectiveness Individual /Pair work Exploring online resources and preparing report	• Performance evaluation • Participant observation

Unit IV: Research Inputs in Tamil Learning (20 hours)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
6. To enable student teachers to promote student effort in learning	• Research in Tamil Language Education and Second Language Pedagogy • Identifying and locating significant concerns related to language learning • Action Research • Investigating any one learner issue • Review of Recent Research Studies in Tamil Language • Place of Tamil in Inter disciplinary studies • Current trends	Intro lecture Enquiry centred discussion Group tasks by assigning specific roles	• Style ofpresentation • Performance • Examine communicative competence

EDU -10.6 : TECHNO PEDAGOGIC CONTENT KNOWLEDGE ANALYSIS : TAMIL.

(Theoretical Discourses – 60 & CE – 30 hours)

Objectives :

- To familiarize with the concept of teacher as a Techno-pedagogue.
- Identify ways of networking both for knowledge enrichment and instruction.
  Familiarize with the scope and possibilities of Models of teaching asan instructional design.
- Develops an awareness of global trends in Tamil Language education.

Contents :

Unit I : TPCK and Self Instructional Strategies.
Unit II Networking in Language Learning.
Unit III: Models of Teaching in Language Practice.
Unit IV: Global Trends in Tamil Language Education

Unit I :TPCK and Self Instructional Strategies (25 hours)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
Familiarizes with the concept of teacher as Techno-pedagogue Identifies the inter-relationship between Content Knowledge, Pedagogic Knowledge and Technological Knowledge	• TCPK. • Techno-Pedagogy • Content Knowledge • Pedagogic Knowledge • Technology Knowledge • Teacher as a Techno-Pedagogue • Nature and scope of Self instructional Strategies • Programmed Instruction - Linear-Branching • Self Instructional modules • Computer Assisted Instruction(CAI)	Comparison of same content available in different digital formats Group task to identify effectiveness of different digital content in realizing proposed learning	• Preparation of computer-basedinstructional material

	• Computer Based Instruction (CBI) • Computer Assisted Language Learning (CALL)	objectives. Demonstration of teaching content with computer as aid and exclusively using computer Pair and group work to prepare computer-based instructional materials	

Unit II: Networking in language learning (20 hours)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
Familiarizes with ways of exploiting Internet resources for both knowledge enrichment and instruction Develops necessary skills for transmission of information and content using websites	• Networking:-Teacher –Teacher; Teacher-Institution; Teacher-Student • Forum-Wiki- Blog-Video Conferencing • Professional communities -Tamil Teacher Blogs-Teacher Tube -TSL -LinkedIn • Content writing-Copy Writing-Outsourcing- Transcription	Introductory talk Demo in Smart Classroom Pair-share Collaborative tasks	• Grouppresentation • Monitoring of activities in virtualworld • CheckingPopularityon Web

Unit III: Models of Teaching in Language Practice (25 hours)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
Familiarizes with Models of Teaching as an instructional design and identifies ways of	• Dimensions of a Model- Syntax, Social System, Principles of Reaction, Support System Instructional and nurturing effects	Distribution of Specimen Lessons based on specific	• Ability to transact the content/ realize objectives in the plans prepared

employing them for teaching Prose, Poetry, Vocabulary and Grammar	• Direct Instruction Model • Concept Attainment Model • Advance Organizer Model • Synectics Model • Role Play Model	Models Group tasks for preparing lessons based on specific Models Assimilation and accommodation	• Checking effectiveness of Lesson Plans based on specific Models for chosen content

Unit IV: Global Trends in Tamil Language Education (20 hours)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
Familiarizes with global trends in Language education Familiarizes with aspects related to translation Gets an awareness of digital resources for Online tutoring	• Advanced Trends in Tamil Language Education • Exercises and pedagogic practices in Tamil language • Literary Translation as an exercise- poetry, fiction, prose, world classics from India, translation from English Literature, critical essays etc. • Journal Clubs – Review and discussion of studies and articles in Journals • Advanced Production of digital resources for Online tutoring	Lecture-cum-discussion on different pedagogical practices. Close reading of literary texts followed by group translation Comparison of articles in journals and magazines to identify form and style required for journal articles followed by critique of articles written by peers Critique of specimen digital resources followed by design and preparation of digital resources for Online tutoring	• Prepares samples • Peer evaluation • Performance in tests

EDU 09 . 7 : CURRICULUM AND RESOURCES IN DIGITAL ERA: MATHEMATICS EDUCATION

(Theoretical Discourse - 60 hrs, CE - 30 hrs)

COURSE OUTCOME (CO):

- **CO 1 To strengthen the experience of the promising student teachers as Mathematics curriculum designers, transmitters and assessors**
- **CO 2 To develop a neo humanistic attitude among the student teachers in the light of Mathematics-Technology-Society-Environment paradigm**
- **CO 3 To undertake a self empowerment initiative in transacting the Mathematics Curriculum from a digital outlook**
- **CO 4 To provide the required research based Mathematics learning experiences so as to undertake a habit of self development through inquiry and investigation**

Contents:

Unit 1: Curriculum Designing in Mathematics Education

Unit 2:Formal and Informal Contexts in Teaching and Learning Mathematics

Unit3i: E- Resources in Teaching and Learning Mathematics

Unit 4: Research Trends in Mathematics Education

Unit I: Curriculum Designing in Mathematics Education

Course Specific Outcome (CSO)	Contents/major concepts	Strategies/approaches	Assessment
1.To understand curriculum and modern approaches in curriculum construction 2. To understand the modern trends in curriculum construction 3. To familiarise with the principles of Curriculum organisation, 4.Tto familiarise various curriculum study groups in India and abroad	* Concept of Curriculum * New approaches to curriculum Construction -Critical Pedagogy, - Problem Based Learning, -Constructivist Learning -Reflective learning - Experiential learning ***Modern trends in curriculum construction** -objective based -child centred -correlation _help for higher education -Reflect as a unified discipline -practicable etc	- Meaningful verbal expression - Buzz session - PBL - Peer instruction - Seminar - Web Streaming -Blog reading	_ Performance analysis in group discussions _ Observation _ Seminar reports _ Participation in the Seminar sessions _ Assessment of daily reflections / Assignment

	* **Principles of Curriculum organisation** – -Topical and Spiral, -Logical and Psychological, _Correlation_ *** Curriculum Study Groups - SMP SMSG, NMP** *** Agencies of Curriculum Development - NCERT and SCERT**		

Unit II: FORMAL AND INFORMAL CONTEXTS IN TEACHING AND LEARNING MATHEMATICS

Course Specific Outcome (CSO)	Contents/major concepts	Strategies/approaches	Assessment
1.To make the student teachersunderstand the need andimportance of community basedresources in the present scenario 2. To understand the man maderesources in the	***Concept of community based resources-** Meaning , need and significance * Human resources *Natural resources- Mathematical aspects found in Environmental phenomena (congruence, similarity, ratio and proportion, geometric shapes,	-Group discussions -Meaningful verbal Presentation -Power pointpresentations	-Performance analysis in groupdiscussions _ Observation _ Seminar reports

present context 3. To make familiarise with informallearning contexts	symmetry etc.) * Man made resources -Mathematics laboratory -Mathematics library - Mathematics Club * Informal learning contexts such as Mathematics exhibitions, Fair, Field Trip etc.	-Assignments -Seminar -Field trip -Community resource mobilization / Contextual analysis	_ Participation in the Seminar

Unit III: E- RESOURCES IN TEACHING AND LEARNING MATHEMATICS

Course Specific Outcome (CSO)	Contents/major concepts	Strategies/approaches	Assessment
1. To familiarise with the role ofmodern technology in the teaching and learning ofMathematics	• Digital resources-CD, DVD, Websites, digital text books *Learning management system(LMS)- definition and Significance *Identification of E-resources(Web 2.0 tools: - Hot Potatoes, Teacher Tube, Edublog, * m-learning-Nature and scope	- PowerPoint Presentations - Extension talks - On line learning - Web Streaming - Explicit teaching - Peer instruction	- Documentation - Assessment of individual performance - Think Aloud Sessions

	*Online Resources *Today's teacher – a digital native– challenges		

Unit IV: RESEARCH TRENDS IN MATHEMATICS EDUCATION

Course Specific Outcome (CSO)	Contents/major concepts	Strategies/approaches	Assessment
1.To understand the need and importance of research in Mathematics education 2.To familiarise the different types of research 3.To identify major thrust areas of research in Mathematics Education	* Research in Mathematics Education- Need and importance *Types of Research -Qualitative & Quantitative -Historical, Fundamental - Action Research *Thrust areas of researches in mathematics education	- Net surfing - Blog reading - Action research - Invited lectures	- Blog posting - Project report - Documentation

Suggested references books :

_ Aggarwal, J.C. (2001). *Principles, Methods & Techniques of Teaching (2nd ed.).* New Delhi: Vikas Publishing House Pvt. Ltd.

_ Ediger, M. & Rao, D. B. (2000).*Teaching Mathematics Successfully*. New Delhi: Discovery Publishing House.

_ James, A.(2005). *Teaching of Mathematics.* New Delhi: NeelkamalPublications,Pvt. Ltd.

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_ Mangal, S.K. *Teaching of Mathematics*. Ludhiana: Prakash Brothers Educational Publishers.

_ Mustafa, M.(2005). *Teaching of Mathematics.* New Delhi: Deep and Deep Publications Pvt. Ltd.

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_ Wadhwa, S. (2000). *Modern Methods of Teaching Mathematics.* New Delhi: Sarup& Sons.

_ Rao, D.B. &Pushpalatha, D.(1995). *Achievement in Mathematics.* New Delhi: Discovery Publishing House.

_ Soman, K. *Ganithasasthrabodhanam*.Thiruvananthapuram: Kerala Bhasha Institute.

EDU 10.7 : TECHNO- PEDAGOGIC CONTENT KNOWLEDGE ANALYSIS: MATHEMATICS

(Theoretical Discourse - 60 hrs, CE - 30 hrs)

COURSE OUTCOME (CO):

- **CO1:ToundertakeaselfempowermentinitiativeintransactingtheMathematicscurriculumfromaTechno-**
  CO2:PedagogicalContentKnowledgeperspective
- **CO3:To get acquainted with different aspects of collaborative use of information communication technology**
- **CO4:To gain a perspective of basic theories and guiding plans for effective transaction of Mathematics.**
- **CO5:To understand the nature and importance of Mathematics from a global perspective**

Contents:

Unit 1: Techno-Pedagogic Content Knowledge and Self Instructional Strategies
Unit 2: Networking in Mathematics Learning
Unit 3: Models of Teaching in Practice
Unit 4: Global Trends in Mathematics Education

Unit 1: Techno-Pedagogic Content Knowledge and Self Instructional Strategies

Course Specific Outcome (CSO)	Contents/major concepts	Strategies/approaches	Assessment
1. To acquaint with the concept, meaning and scope of techno-pedagogic Content knowledge 2. To understand the	**Techno-pedagogue**-Concept, meaning and scope _ Role of teacher as a techno-pedagogue _ Concept of TPCK _ Interrelationship of Content knowledge,	Group discussions Seminars Meaningful verbal presentation	_ Summative evaluation _ Performance analysis in group discussions

role of the teacher as a techno-pedagogue 3. To enable the student teacher to generate and transact TPCK based content analysis of Secondary school text books and CD resources to help students to practice self-instructional strategies	pedagogic knowledge and technological knowledge _ Scope and challenges of TPCK _ Generation and transaction of TPCK based content analysis of secondary school textbooks and CD sources	Power point presentations Illustrations Online assignment Using the possibilities of blogs in networking Video clippings	_ Observation _ Participation in the Seminar Sessions _ Examples cited in their lecture note _ dramatisation

Unit II: Networking in Mathematics Learning

Course Specific Outcome (CSO)	Contents/major concepts	Strategies/approaches	Assessment
1. To familiarise the student teachers with net working as a means of personal and professional growth	• Networking - Meaning and scope *Networking in learning Mathematics	Demonstrations Illustrations Video clippings Debating	_ Document analysis _ Student reports - Digital document analysis - Blog posting

of teachers 2. To provide hands on experience in online learning	*Concept of E-twinning for institutional/professional growth *creation of personal e-mail ID and BLOGS with a minimum of 5 posts for promoting the teaching and learning of Mathematics	Web based illustrations Power point presentations	(**Practicals)** o **Creation of blog and posting**

Unit III: Models of Teaching in Practice

Course Specific Outcome (CSO)	Contents/major concepts	Strategies/approaches	Assessment
1. To understand models of teaching 2. To understand the application of major psychological theories	Concept of a model of teaching _ - Components of a teaching model _ - Families of teaching models _Detailed study and practice on Concept of Attainment Model , Inquiry Training Model and constructivist model	- Meaningful verbal expression - Group discussion - Peer tutoring - Observation - Brain storming - Video analysis	Performance analysis in group discussion Class test Observation Preparation of lesson templates using Models of Teaching (Discussion, Demonstration & criticism lessons)

Unit IV:Global Trends in Mathematics Education

Course Specific Outcome (CSO)	Contents/major concepts	Strategies/approaches	Assessment
1.To compare mathematicseducation across the world 2.To identify recent projects in science teaching in India	• Comparison of Mathematics Education in World Wide –Mathematics teaching Japan, USA UK and India Recent projects in Mathematics teaching in India-it@school,Samagra, OFSET,	- Web streaming - Documentation - Invited lectures - Seminar	- Document analysis - Blog posting

Suggested references books :

_ Aggarwal, J.C. (2001). *Principles, Methods & Techniques of Teaching (2nd ed.).* New Delhi: Vikas Publishing House Pvt. Ltd.

-Bode, H. B. (1927). *Modern educational theories.* New York: Macmillan.

_ Ediger, M. & Rao, D. B. (2000).*Teaching Mathematics Successfully*. New Delhi: Discovery Publishing House.

_ James, A.(2005). *Teaching of Mathematics.* New Delhi: NeelkamalPublications,Pvt. Ltd.

_ James, A. (2006). *Techniques of Teaching Mathematics.* New Delhi: Neelkamal Publications Pvt. Ltd.

_ Joyce, B., Weil, M. & Calhoun, E. (2009). *Models of Teaching (8th ed.)*.New Delhi: PHI Learning Private Limited.

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_ Orton, A. (2007).*Learning Mathematics.(3rd ed.).* London: Continuum

_ Siddiqui, H.S. & Khan, M.S. (2004). *Models of Teaching - Theory and Research.* New Delhi: Ashish Publishing House.

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EDU- 09.8: CURRICULUM AND RESOURCES IN DIGITAL ERA: PHYSICAL SCIENCE EDUCATION

(Theoretical discourses - 60 hrs, CE - 30 hrs)

COURSE OUTCOME (CO):

- CO 1 To strengthen the experience of the promising student teachers as Science curriculum designers, transmitters and assessors
- CO 2 To develop a humanistic attitude among the student teachers in the light of Science-Technology-Society-Environment paradigm
- CO 3 To undertake a self-empowerment initiative in transacting the Physical Science Curriculum from a digital migrant outlook
- CO 4 To provide the required research based science learning experiences so as to undertake a habit of self-development through inquiry and investigation

Contents:

Unit 1: Curriculum Designing in Physical Science Education

Unit2: Formal and Informal Contexts in teaching and learning of Physical Science

Unit 3: E-Resources in Teaching and Learning of Physical Science

Unit 4: Research in Physical ScienceEducation

Unit 1: Curriculum Designing in Physical Science Education (20+2=22 hours)

Course Specific Outcome (CSO)	Major concepts	Strategies &Approaches	Assessment
1. To acquaint with the concepts of curriculum and syllabus 2. To understand and apply the principles of curriculum construction 3. To familiarize with the curriculum organization 4. To familiarize with the recent trends in curriculum construction in state, national and international level 5. To understand correlation of Physical Science within the subject as well as with other subjects.	1. Curriculum and syllabus-Meaning. 2. Principles of curriculum construction. 3. Types of curriculum-subject centred, activity centred, core curriculum 4. Approaches to curriculum organisation-Concentric approach, Spiral approach, Type study, Topical approach, Historical approach, General science and disciplinary approach 5. Hidden curriculum 6. Trends in curriculum construction-NCERT (NCF)- science basic criteria of validity of science curriculum and science curriculum at different stages-outlook-and SCERT curriculum (KCF)-major criticisms leveled against the prevailing science education and aims of education (5 domains), Issue based curriculum, Critical Pedagogy 7. Critical analysis of secondary school curriculum in Physical Science prescribed by SCERT. 8. Science-A Process Approach (SAPA), Cognitive Acceleration Through Science Education (CASE) / 'Let's	Meaningful verbal expression Buzz session PBL Peer instruction Seminar Web Streaming Document analysis Blog reading	• Questioning • Role performance analysis in Buzz discussion • Concept mapping • Open book analysis

	Think through Science'- 9. Correlation- Incidental and systematic, Correlation within the subject, Correlation of Physical science with other subjects such as biology, mathematics, language, geography, history, earth science, music, art and craft, life and environment		

Unit 2: Formal and Informal Contexts in Teaching and Learning of Physical Science (20+10=30 hours)

Course Specific Outcome (CSO)	Major concepts	Strategies &Approaches	Assessment
1. To acquaint with the concept and significance of community based resources 2. To familiarize various formal and informal learning contexts 3. To identify the contributions of human resources in local community 4. To identify governmental and non-governmental movements for popularizing science	a. Community based resources- Meaning , need and significance b. Formal science learning contexts– • Science library-importance and organisation, web resources – • Science laboratory- Importance and organisation, Registers, Rules, Accidents andFirst aid • Field trips and excursions- Need and importance • Science fairs and exhibition-Significance, organisation and evaluation • Science club- Significance, organization and activities c. Informal learning contexts: Science Park , museum, historical monuments, play grounds, music room, planetarium, ANERT, -Human resources-Scientists and eminent personalities in local community. d. Governmental and non-governmental movements and organizations for popularising science-Science Talent Search Programme, Science Olympiad (HBCSE), KVPY, Sasthraposhini scheme, Kerala Shastra Sahitya Parishad	Narrative expression sessions in small or medium groups Assignment Seminar Field trip Community resource mobilization / Contextual analysis	• Performance analysis • Quiz programme • K-W-L charting • Profile presentation • Blog posting

Unit 3: E-Resources in Teaching and Learning of Physical Science (15+5=20 hours)

Course Specific Outcome (CSO)	Major concepts	Strategies &Approaches	Assessment
1. To identify various digital resources in learning of Physical Science 2. To understand the significance of Learning Management System 3. To familiarize various - resources 4. To identify the challenges and means of rescue a teacher should possess in this digital era	1. Digital resources-CD, DVD, Websites – 2. Learning Management System (LMS)-definition and significance-MOODLE 3. Identification and use of e-resources: 4. Web 2.0 tools: - Hot Potatoes, Ptable (Dynamic periodic table), Edmodo, Teacher Tube, Edublog, Chem Collective 5. Today's teacher – a digital native– challenges	Web Streaming Explicit teaching Peer instruction	• Documentation • Assessment of individual performance • Think Aloud Sessions

Unit 4: Research in Physical Science Education (5+3=8 hours)

Course Specific Outcome (CSO)	Major concepts	Strategies &Approaches	Assessment
1. To understand the concept and scope of research in science education 2. To identify the role of science teacher as a researcher 3. To identify the recent research areas in Physical Science education	• Research - meaning and scope • Science teacher as a researcher • Recent research in Physical Science education – An Overview	Net surfing Blog reading Action research Invited lectures	• Blog posting • Project report • Documentation

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- David Heywood, Joan parker (2010): The Pedagogy of Physical Science: London, Springer.
- FundaOrnek,IssaM.Saleh (Eds.) (2012):Contemporary Science Teaching Approaches: Promoting Conceptual Understanding in Science:USA, Information Age PublishingGroup.
- Jeffrey Michael Reyes, Duncan Andrade, Ernest Morrell (2008): The Art of Critical Pedagogy: Possibilities for Moving from Theory to Practice: New York, PeterlangPublishingInc.
- JohnWallace, William Louden (2002): Dilemmas of Science Teaching [electronic resource]: perspectives on problems of practice: New York, Routledge.
- Mariamma Mathew (2014): Teaching science for biological and physical sciences: NAS Publishers: Kerala
- Radha Mohan(2007): Innovative Science Teaching: New Delhi, Prentice Hall of India PvtLtd.

EDU – 10.8: TECHNO-PEDAGOGIC CONTENT KNOWLEDGE ANALYSIS – PHYSICAL SCIENCE

(Theoretical Discourses - 60 hrs, CE - 30

hours)

COURSE OUTCOME (CO):

- CO 1 To undertake a self-empowerment initiative in transacting the Physical Science curriculum from aTechno-Pedagogical Content Knowledge perspective
- CO 2 To get acquainted with different aspects of collaborative use of information communication technology
- CO 3 To gain a perspective of basic theories and guiding plans for effective transaction of physical science
- CO 4 To understand the nature and importance of physical science from a global perspective

Contents:

Unit 1: Techno-Pedagogic Content Knowledge and Self Instructional Strategies

Unit 2: Models of Teaching in Practice

Unit 3: Networking in Physical Science Learning

Unit 4: Global Trends in Physical Science Education

Unit 1: Techno-Pedagogic Content Knowledge and Self Instructional Strategies (15 + 8 =23 hrs)

Course Specific Outcome (CSO)	Major concepts	Strategies &Approaches	Assessment
1. To conceptualize the basic principles of Techno-Pedagogic Content Knowledge Analysis in Physical Science Teaching and Learning 2. To identify the role of science teacher as a techno-pedagogue 3. To understand various Self Instructional Strategies	• Techno-Pedagogic Content Knowledge Paradigm- Interrelationship of Content Knowledge, Pedagogic Knowledge and Technological Knowledge, • TPCK based content analysis of selected units of the secondary readers in Physical Science. • Science teacher as a techno-pedagogue. • Techno - pedagogic competencies- identification and use of various technological resources and devices for teaching-learning • Self Instructional Strategies- Meaning, Types- Programmed Instruction (Linear, branching), Modular Instruction, Personalized System of Instruction, CAI and CMI	Small group discussion Documentation Web searching Self-study Power Point Presentations Seminar Didactic Questioning	• Participant observation • Documentanalysis • On-task behaviourinclass • Reflectivejournal

Unit 2: Models of Teaching in Practice (25 +20 = 45 hrs)

Course Specific Outcome (CSO)	Major concepts	Strategies &Approaches	Assessment
1. To understand the applications of major psychological theories 2. To familiarize with various thinking skills 3. To understand the models of teaching	• Application of Psychological theories of Piaget, Bruner, Gagne, Vygotsky and Ausubel, and Gardner • Thinking skills – logical thinking, critical thinking, creative thinking, reflective thinking • Models of teaching-Concept Attainment Model, Inquiry Training Model, Advance Organiser Model, and 5E model	• Meaningful verbal expression • Group discussion • Peer tutoring • Observation • Brain storming • Video Analysis	• Analysis in group discussion • Class test

Unit3: Networking in Physical Science Learning (14 +10 = 24 hrs)

Course Specific Outcome (CSO)	Major concepts	Strategies &Approaches	Assessment
1. To understand the role and purposes of networking in learning physical science	• Networking - Meaning and scope • Networking in learning of Physical Science-Purposes Types- Technical, Personal and Institutional	Net surfing Blog reading Invited lectures Digital Modular Expositions	• Digital document analysis • Blog posting • Debate • Online test

Unit 4: Global Trends in Physical Science Education (18 +10 = 28hrs)

Course Specific Outcome (CSO)	Major concepts	Strategies &Approaches	Assessment
1. To compare science education across the world 2. To identify recent projects in science teaching in India	1. Comparative Science Education World Wide with special emphasis to secondary science curriculum approaches, transactional strategies and learning outcomes - Science teaching in Finland and Canada. 2. Recent projects in science teaching in India –KITE (IT@School project) – objectives and scope – samagra-VICTERS	Web streaming Documentation Invited Lectures	• Document analysis • Blog posting

Reference:

- AACTECommittee(2008):HandbookofTechnologicalPedagogicalContentKnowledge(TPCK)forEducators:Washington,DC,Routledge/Taylor&Francis
- BhattacharyaS.P.(1994):ModelsofTeaching:NewDelhi,RegencyPublications.
- BruceR.Joyce,MarshaWeilandEmilyCalhoun(2011):ModelsofTeaching(7thEd.):USA,PearsonEducation
- FrankRennie&TaraMorrison(2013):E-LearningandSocialNetworkingHandbook(SecondEdition):NewYork,Routledge.
- FrankRennie,TaraMorrison(2013):e-LearningandSocialNetworkingHandbook:ResourcesforHigherEducation:NewYork,Taylor&Francis.
- JanieGrossStein,RichardStein(Ed.)(2001):NetworkofKnowledge:CollaborativeInnovationinInternationalLearning:Toronto,Canada,UniversityofToronto Press Incorporated
- MangalS.K.&UmaMangal(2009):EssentialsofEducationalTechnology:NewDelhi,PHILearningPvtLtd.
- Mariamma Mathew (2014): Teaching science for biological and physical sciences: NAS Publishers:Ker

- WasaailalIthisalwathaknologiyafithaaleem:DrAbdalhafizmuhammedsalama,DaralFjkar
- Al thadreeswaIadad al Muallim: Dr.S Abdulrahman qindeel Dar al Nashr alDuwali
- Murshid al Muallim: Richard D. C ; Aalam al Kutub alQahira
- AlThadreesAhdafuhuwausasuhuwaAsaleebuhuThaqweemuNathaijuhuwaThathbeeqathuhu:DrFikriHasanRayan,Aalmalkutub ,alqahira
- MadkhalIlaTharbiyaalmuthamayyizeenawalMauhoobeen,Daralfikarlialthibaawa Nashr
- Kuthub al Mudariseenlilmadaris al thanawiyya: Majli al wilayalilbuhuzuthabaviyyawathadreeb
- Altharbiyawathuruquthadrees:SalihabdulAzeez& AbdulAzeezAbdulMajeed; DaralMaarif,AlQahira
- KaifaThulqiDarsak:Yabhasufiusoolialtharbiyathwathadrees,DaralIlmlilMalayeen,Bairut.
- AlMuwajjahalAmaliliMudarriseeal LughaAl Arabiyya:AbidThoufeeqalHashmi;AlRisalapublishingHouse,Bairoot
- National Curriculum Frame work 2005 , NCERT , NewDelhi
- Teaching Strategies: A guide to better instructions, HMCo. NewYork
- Research in Education; Best J W, & Kahn J.V, prentice hall India PvtLtd.

EDU – 09 . 9 : CURRICULUM AND RESOURCES IN DIGITAL ERA : NATURAL SCIENCE EDUCATION

(Theoretical discourses -50 Marks/60 hours & CE-25 Marks /30 hours)
COURSE OUTCOME (CO):

Enable the student teachers:

- CO 1 To understand the different types of resources for teaching Natural Science.
- CO 2 To locate different reference materials related with Biological Science.
- CO 3 To identify the school and community resources for better Biological Science learning.
- CO 4 To familiarize and understand the natural resources, man-made resources in teaching Natural Science.
- CO 5 To familiarize the different club activities related with Natural Science.
- CO 6 To understand the steps of organizing field trip, excursion, science fair & exhibition.
- CO 7 To understand the different approaches of organizing Biological Science curriculum.
- CO 8 To familiarize the modern trends in curriculum movements in India and abroad.
- CO 9 To familiarize and understand the e-learning resources for teaching Natural Science.
- CO 10To identify research inputs in genetic engineering, medical field & environmental issues.

CONTENTS :

Unit I : Resource for Natural Science Curriculum Transaction.
Unit II : Curriculum Trends in Biological Science.
Unit III : E – Resources in teaching Learning of Natural Science.
Unit IV : An Introduction to Research in Biological Sciences

UNIT-I-RESOURCE FOR NATURAL SCIENCE CURRICULUM TRANSACTION (Theory hours-20)

Course Specific Outcome (CSO)	Major concepts	Strategies & Approaches	Assessment
15. To understand different types of resources. 16. To understand the relevance & scope of different types of resources. 17. To understand, and utilize school based resources in formal and informal learning. 18. To develop skill in designing a high school biology laboratory. 19. To organize different extra-curricular activities related to science teaching. 20. To identify, and utilize different community resources for science learning.	• Different types of resources. • Relevance & scope of different types of resources. • **School based Resources For Science Learning:** • a. Library –School and Class library- importance and its organization, Types of resources for accessing information- book, non book and web resources. • b. Science laboratory- significance and organization –Designing a high school biology laboratory. • c. Club activities - Science club, Science fair, Exhibition, Manuscript magazine, Field trip & Excursion, Community awareness programme • d. Living corners-Aquarium, Terrarium and Vivarium • e. Different types of garden-Vegetable, Ornamental and Herbal. • f .Text books- qualities of good science text book, Text book analysis. Supplementary reader. • g. Hand book for teachers and Work book for learner. • h. Reference material-encyclopedia, newsletters, magazines, journals. • **Community Based Resources For effective Science Learning:** • Community resources for science learning- relevance and scope. • Identification of Community resources	Group discussion Seminar PBL Multimedia and interdisciplinary approach. Team teaching. Peer tutoring. Meaningful verbal expression. Organizing & designing science library, science laboratory.	• Quiz programme. • Participation in group discussion. • Questioning. • On-task behavior • Field trip report. • Assignments • Seminar presentation.

	for better science teaching and learning. • Human resources- e.g. Resource persons/ eminent teachers/ personalities/ scientists in the local community. • Natural Resources- e.g. .pond /lake/river/sea/ forest/ wet land/ sacred grooves etc. • Man made Resources- e.g. Museum/ Zoo/ Botanical garden/ Agrifarms / hospital, Krishi VignjanKendrum /Research Center under State & Central government.		

UNIT II .CURRICULUM TRENDS IN BIOLOGICAL SCIENCE (Theory hours-18)

Course Specific Outcome (CSO)	Major concepts	Strategies & Approaches	Assessment
1. To understand theMeaning-functions and Principles of curriculum construction. 2. To familiarize different types of curriculum. 3. To understand and apply the principles of curriculum construction. 4. To understand and compare the curricular movements in national and international level. 5. To understand the types of correlation in the teaching learning process. 6. To understand the importance of correlation in the teaching learning process. 7. To make a Critical analysis of the prevailing secondary school biology syllabus.	• Curriculum-Meaning-functions and, Principles of curriculum construction, • Types of curriculum- subject centered, activity centered, integrated ,core and hidden curriculum. • Approaches to curriculum organization-Topical, Subject, Concentric, Spiral and Integrated/ Correlation approach (Incidental & Systematic correlation). • Factors affecting curriculum organization. • Criteria of a good Natural science curriculum. • Critical analysis of the prevailing secondary school biology syllabus. • Trend in curriculum construction-NCERT(NCF) -Relevant sections of NCF ,Science-basic criteria of validity of a science curriculum, and science curriculum at different stages-outlook and SCERT Curriculum (KCF). • Curriculum reforms in India(NCERT) & abroad (BSCS).	Meaningful verbal expression Group discussion Small group sessions Peer instruction Narrative expression sessions in small or medium groups. Brain storming. Seminar. PBL. Modular approach. Multimedia and interdisciplinary approach. Team teaching. Peer tutoring	• Participation in group discussion. • Questioning. • On-task behavior in class. • Tests. • Science dairy. • Daily reflective journal. • Participant observation.

UNIT III E-RESOURCES IN TEACHING LEARNING OF NATURAL SCIENCE (ICT Materials) (Theory hours-11)

Course Specific Outcome (CSO)	Major concepts	Strategies & Approaches	Assessment
1. To understand and compare the Educational CDs developed by SIET, NCERT, IT@ school for the learning of biology at secondary level. 2. To familiarize Web tools related with HS Biology. 3. To familiarize e-journals, e-books related with Biology. 4. To understand about the use of e-resources. 5. To develop a skill in using e-resources. 6. To understand the meaning-relevance & scope of virtual laboratory & virtual dissection. 7. To identify & use virtual laboratory & virtual dissection related with HS Biology.	• An introduction to the contribution of e-learning materials developed by SIET, NCERT ,SAMAGRA, IT@ school& VICTERS for the learning of biology at secondary level. • Web 2.0 tools: Hot Potatoes , Edublog. • An introduction to e-journals, e-books related with Biology • Meaning-relevance & scope of virtual laboratory & virtual dissection.	Modular approach. Multimedia and inter disciplinary approach. Team teaching. Peer tutoring Meaningful verbal expression Group discussion Using internet effectively for collecting information.	• Participation in group discussion. • Questioning. • On-task behavior • Report of video analysis. • Involvement in using e-journals, e-books related with Biology. • Involvement in using virtual laboratory & virtual dissection.

UNIT-IV AN INTRODUCTION TO RESEARCH IN BIOLOGICAL SCIENCES(Theory hours-11,)

Course Specific Outcome (CSO)	Major concepts	Strategies & Approaches	Assessment
1. To understand research inputs in genetic engineering, medical sciences & Environmental issues. 2. To understand the emerging challenges related with organ transplantation. 3. To get an idea about the importance of family farming. 4. To get an idea about the existing waste disposal measures in a scientific way. 5. To suggest innovative measures to waste disposal.	• **4.1Research inputs in genetic engineering** (Give brief introduction about Human Genome Project, Tissue culture)**.** • **4.2 Research inputs inmedical sciences** (Meaning and scope of Organ transplantation- a new hope for life, Nano-technological applications in medical field) • **4.3Research inputs inEnvironmental issues (**Family farming, waste disposal).	Multimedia and inter disciplinary approach. Team teaching. Peer tutoring Meaningful verbal expression Group discussion Assignment Seminar	• Peer tutoring • Meaningful verbal expression • Group discussion • Assignment • Seminar presentation.

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- http://www.amazon.com/**books**/dp/0805863567
- http://ictevangelist.com/**techno**logical-**pedagogic**al-and-conte
- How the web will change the classroom by Mohan, R.,(2007).
- https://d1jt5u2soh3gkt.clc

EDU – 10. 9 : TECHNO-PEDAGOGIC CONTENT KNOWLEDGE ANALYSIS -NATURAL SCIENCE.

(Theoretical Discourses -50 Marks/60 hours & CE-25 Marks /30 hours)
COURSE OUTCOME (CO):

Enable the student teacher:

- CO 1 To develop understanding and application of Techno-Pedagogic Content Knowledge Analysis
- CO 2 To develop skill in preparation and practice of Technology Enhanced Learning Materials.
- CO 3 To understand and apply Online Assessment and Competency Enhancement Avenues**.**
- CO 4 To identify Net Working as a means of Personal and Professional Growth
- CO 5 To understand Classroom Management Principles Essential for Effective Pedagogic Transaction.
- CO 6 To get an idea about Global Trends in Science Education.
- CO 7 To familiarize The Modern Trends in Science Education at Global Level.
- CO 8 To get an idea about Self Instructional Strategies.
- CO 9 To understand about Self Instructional Strategies.
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CONTENTS :

Unit – I : Techno - Pedagogic Content Knowledge (TPCK) .

Unit – II : Networking in Natural Science Learning.

Unit – III : Models of Teaching & Self-instructional Strategies.

Unit – IV : Global Trends in Natural Science Education.

UNIT. I TECHNO PEDAGOGIC CONTENT KNOWLEDGE (TPCK) :A CONCEPTUAL ANALYSIS.
(Hours-22)

Course Specific Outcome (CSO)	Major concepts	Strategies & Approaches	Assessment
1. To understand aboutthe conceptual analysis of Technological Pedagogical Content Knowledge(TPCK) 2. To understand and find inter relationships of different areas of TPCK 3. To develop skill in Technological Pedagogical Analysis of Content Knowledge (TPCK) of Secondary School Biology.	• Technological Pedagogical Analysis of Content Knowledge (TPCK)-meaning and scope. Different knowledge areas of TPCK- • Content Knowledge (CK), • Pedagogical Knowledge (PK), • Technology Knowledge (TK) • Pedagogical Content Knowledge (PCK), • Technological Content Knowledge (TCK), Technological Pedagogical Knowledge (TPK), and • Technological Pedagogical Content Knowledge (TPCK). • Interrelationships of different areas of TPCK • Science teacher as a techno-pedagogue • Technological Pedagogical Content Knowledge Analysis of Secondary School Biology.	Meaningful verbal expression. Group discussion. Narrative expression sessions in small or medium groups. Multimedia and interdisciplinary approach. Team teaching. Peer tutoring	• Participation in group discussion. • Questioning. • On-task behavior in class. • Tests. • Science dairy. • Daily reflective journal • Participant observation • Report of Technological Pedagogical Content KnowledgeAnalysis of Secondary School Biology.

UNIT-II NETWORKING IN NATURAL SCIENCE LEANING (Hours-18)

Course Specific Outcome (CSO)	Major concepts	Strategies & Approaches	Assessment
1. To understand the meaning & scope of networking in science teaching. 2. To develop skill in Networking through different ways. 3. To develop skill in the preparation and practice of ICT and Multimedia based materials in the teaching learning process of science 4. To develop skill in the preparation and practice of online assessment tools in science teaching learning process. 5. To understand different competitive examinations for teachers. 6. To understand the Educational entrepreneurship - Career possibilities for trained graduate and post graduate science students	• **Networking**- meaning and scope of Net working in science learning. • **Development of one Blog** for Natural science class and 5 postings by each student for promoting teaching learning/social issues/challenges etc. • **e-twinning**- means for institutional and professional growth. • **ICT and Multimedia as technology enhanced communication devises in the teaching of life science**- Collection/ Preparation of e-materials for pedagogic transaction of secondary school biology syllabus including environmental issues affecting local community(Power points, video clippings, pictures, instructional materials) • **Online assessment**- -meaning and scope, down load an Online quiz maker and use it during practice teaching. • **Competitive examinations for secondary school students** – Science Talent Search Scheme, Science Olympiad, Google science fair. • **Competitive Examinations for teachers** - KTET,CTET , SET,CSIR &	Group discussion Seminar Personality profile presentation Reflective practices. PBL Multimedia and interdisciplinary approach. Team teaching. Peer tutoring Net working e-twinning Blog posting	• Online assessment • Quiz programme. • Participation in group discussion. • Questioning. • On-task behavior. • Student's portfolio. • Blog posting • Net working • e-twinning • Preparation of e-materials • Online Assessment

	UGC NET. • **Educational entrepreneurship** - Career possibilities for trained graduate and post graduate science students.		

UNIT-III MODELS OF TEACHING & SELF INSTRUCTIONAL STRATEGIES (Hours-15)

Course Specific Outcome (CSO)	Major concepts	Strategies & Approaches	Assessment
1. To understand the basic elements in the models of teaching 2. To develop skill in selecting suitable models of teaching for transacting pedagogy. 3. To develop and design lesson plans based on Concept Attainment Model(CAM), Inquiry Training Model(ITM), 5E Model of BSCS,& Inductive Thinking Model.. 4. To develop skill in selecting suitable self-instructional strategies for transacting pedagogy. 5. To understand about Computer Assisted Instruction (CAI).Its advantages & disadvantages. 6. To understand &prepare Modules.	• **Models of teaching:** Introduction, Elements and Families of models of teaching. • **Concept Attainment Model(CAM),** • **Inquiry Training Model(ITM),** • **5E Model of BSCS,** • **Inductive Thinking Model** • **Self Instructional Strategies**- An overview about Self Instructional Strategies, advantages & disadvantages. • **An introduction to Computer Assisted Instruction(CAI**), its advantages & disadvantages. • **Modules,** its advantages & disadvantages.	Meaningful verbal expression Group discussion Small group sessions Peer instruction Narrative expression sessions in small or medium groups. Brain storming. PBL. Modular approach. Multimedia and interdisciplinary approach. Concept Attainment	• Participation in group discussion. • Questioning. • On-task behavior in class. • Tests. • Science dairy. • Daily reflective journal • Lesson plans based on models of teaching. • Module preparation

		Model(CAM) Inquiry Training Model(ITM) 5E Model of BSCS Inductive Thinking Model	

UNIT-IV GLOBAL TRENDS IN NATURAL SCIENCE EDUCATION. Hours-5)

Course Specific Outcome (CSO)	Major concepts	Strategies & Approaches	Assessment
1. To familiarize & understand about the global trends in education.	• An introduction to global trends in education • University & Career readiness • Individualized learning	Narrative expression sessions in small or medium groups. Meaningful verbal expression Multimedia approach Discussion	• Participation in group discussion. • Questioning. • On-task behavior in class. • Tests. • Science dairy.

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- NarenderaVaidhya,(2006).Science Teaching in School for the 21st Century ,deep and deep publications PVT, New Delhi.
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- http://ictevangelist.com/**techno**logical-**pedagogic**al-and-conte

EDU - 09.10 : CURRICULUM AND RESOURCES IN DIGITAL ERA: SOCIAL SCIENCE EDUCATION

(Theoretical Discourses -50 Marks/60 hours & CE-25 Marks /30 hours)

COURSE OUTCOME (CO):

- CO 1 To get acquaint with modern principles and trends in the construction and organization of Social Science curriculum
- CO 2 To become equipped in retrieving suitable teaching learning resources
- CO 3To attain proficiency in IT enabled instructional resources and to become talented in applying innovative strategies and approaches for instructional effectiveness.
- CO 4 To generate a broad perspectives of e-resources in instructional practices and to develop skill in retrieving and transacting Social Science curriculum through e-resources.
- CO 5 To develop a positive attitude towards research for curriculum development and to adopt& develop innovative teaching learning strategies.

Contents :

Unit 1 Curriculum Designing in Social Science Education

Unit 2 School and Community Based Instructional Resources in Teaching Social Science

Unit 3 Resource Mapping in Social Science.

Unit 4 Research Trends in Social Science Education

Unit 1: Curriculum Designing in Social Science Education (7 Hours + 4 Hours)

Course Specific Outcome (CSO)	Major concepts	Strategies & Approaches	Assessment
2. To get acquaint with modern principles and trends in the construction and organization of Social Science curriculum 3. To become conversant with NCF and KCF to develop approaches to Social Science Education	• Curriculum – Concept, Principles of designing Social Science curriculum • Approaches, types of curriculum, Modern trends in designing Social Science curriculum. • Brief outline about NCF (2005) KCF (2007) and its approaches in Social science curriculum formation.	Analytical approach Seminar Co-operative learning Prepare a paper on NCF and KCF and its approaches to Social Science curriculum.	• Seminar with slide presentation **(CE- Edu. 09)**

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- http://www.ssamis.com/web/downloads/KCF 2007.pdf
- http://www.case.edu/artsci/engl/emmons/writing/pedagogy
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- NCF (2005) and KCF (2007)

Unit 2 : School and Community Based Instructional Resources in Teaching Social Science (8 Hrs + 4 Hrs)

Course Specific Outcome (CSO)	Major concepts	Strategies & Approaches	Assessment
• To identify and to utilize community resources for the effective transaction of Social Science Curriculum	• Community Resources- meaning, nature, need and scope in Social Science. • School to community and community to school- Resources- Historical- Palace, museum, caves, forts, archives etc, Geographical- Planetorium, Mountains, seashore, rift valley etc, Political- Gramasabha, Panchayat, Legislative assembly, memorials etc, Economical- market, bank, stores etc.	Discussion Prepare a list of community recourses- discuss and present the ways to utilize the community recourses Visit to any one of the community resources.	• Field trip to any one site with action plan and report **(Practical Sem.2)**

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Unit 3: Resource Mapping in Social Science

Course Specific Outcome (CSO)	Major concepts	Strategies & Approaches	Assessment
4. To generate a broad perspectives of different - resources in instructional practices 5. To develop skill in retrieving and transacting Social Science curriculum through different resources	• Effective use of Print Media in Social Science learning • Need for Social Science Laboratory Concept of Time sense and place sense in Social Science learning. • Role of Library in Social Science Education • The need and role of Social Science clubs in community related curricular programme	Discussion Developing social science laboratory Preparation of catalogue for Social Science Library	• Use e-resources to prepare any 4 learning materials • **Test for units 1,2 & 3 (CE-Edu. 09)**

Reference

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4. Research Trends in Social Science Education

Course Specific Outcome (CSO)	Major concepts	Strategies & Approaches	Assessment
6. To develop a positive attitude towards research in the curriculum development process and to utilize the research findings in the teaching learning process.	• An introduction to Research in Social science Education- Need and importance • Teacher as a researcher in Social science • Analysis of Research outcomes in the teaching and learning of Social Science education.	Group Discussion Prepare a paper (utilizing internet) on the latest research findings on pedagogical aspects in Social science education and conduct a seminar.	• Observe the participation of student teachers in the learning process

Reference

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EDU – 10.10 : TECHNO PEDAGOGIC CONTENT KNOWLEDGE ANALYSIS – SOCIAL SCIENCE

(Theoretical Discourses -50 Marks/60 hours & CE-25 Marks /30 hours)

COURSE OUTCOME (CO):

- CO 1 To conscientize the prospective teachers become a techno- pedagogue and become aware of the concept TPCK
- CO 2 To grow to be competitive in designing digital texts and e-content in Social Science
- CO 3 To familiarize with the networking system for institutional and professional growth.
- CO 4 To get acquainted with the need of creating e-mail and blogs for pedagogical analysis.
- CO 5 To prepare the prospective teachers as reflective practitioners

Contents :

Unit 1 Techno Pedagogic Content Knowledge Analysis (TPCK) and Self Instructional Strategies

Unit 2 Networking in Social Science Learning

Unit 3 Models of Teaching in Social Science.

Unit 4 Global Trends in Social Science Education

Unit 1 Techno Pedagogic Content Knowledge Analysis (TPCK) and Self Instructional Strategies

Course Specific Outcome (CSO)	Major concepts	Strategies & Approaches	Assessment
7. To conscientize the prospective teachers become a techno-pedagogue 8. To become aware of the concept TPCK 9. To become capable of analyzing content based on technology 10. To get aware on self instructional strategies.	• Inter relationship between Technology, Pedagogy and Content. • Teacher as Techno-Pedagogue in Social Science • Scope and purpose of Techno-Pedagogic Content Knowledge Analysis. • Self Instructional Strategies: Importance • Programmed instruction • CAI and CMI • Instructional modules	Meaningful verbal learning On line learning Group discussion TPCK based content analysis (Selected units of secondary/ higher secondary text books)	• Prepare a self explanatory note on 'Teacher as a Techno-Pedagogue' • TPCK based Content analysis on any one unit. • Video script developing & recording & uploading • (**CE- Edu.10**)

References

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- Refernces:
- Alexey Semenov, UNESCO, (2005): Information and Communication Technologies in Schools: A Handbook for Teachers.
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Unit 2 Networking in Social Science Learning

Course Specific Outcome (CSO)	Major concepts	Strategies & Approaches	Assessment
11. To grow to be competitive in designing digital texts and e-content in Social science. 12. To become empower in surfing digital resource for transacting Social science curriculum.	• Applications of Social Networking systems Professional and Institutional growth: Through network-twining • Concept of e- resources, Web resources, social networking, Educational blogs, e-journals, e-learning, m- learning, web based learning. virtual learning. • Learning Management System (LMS) in the teaching- learning of Social science. IT enabled instructional resources: On line resources, videos, YouTube resources, animations, film clippings.	Discussion Online learning Demonstration Workshop	• Observation • Report verification

Reference

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- www.aptaracorp.com/digital-**content**-production/**econtent-development**
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- www.net-security.org
- blog.ebayclassifieds.com
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- http://www.bbk.ac.uk/linkinglondon/resources/
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- http://www.teacher.ne

Unit 3 Models of Teaching Social Science

Course Specific Outcome (CSO)	Major concepts	Strategies & Approaches	Assessment
13. To acquaint with the concept, families and selected items of Models of Teaching 14. To acquaint with practice of developing lesson transcripts based on selected Models of Teaching.	• Models of teaching – Introduction, Operational Heart, Different families • Concept Attainment Model with lesson transcripts • Advance Organizer Model with lesson transcripts • Group Investigation Model with lesson transcripts. • Jurisprudential model & Inquiry Training Model	Scaffolding strategies Demonstration Simulation Online learning	• Discussion lesson-5(ICT-1, activity based-1, Models-3) • Demonstration- 2 (Models) • Criticism (5) • (**Practicals** – sem-2)

References

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Unit 4 Global Trends in Social Science Education

Course Specific Outcome (CSO)	Major concepts	Strategies & Approaches	Assessment
15. To help the prospective teachers for comparative study of social science education in a global perspective.	• Global trends in Social Science education • Social Science education in other states and other Nations.	Discussion – Web searching. Seminar- compare SS	• Assignment & seminar report

	• Role of Social Science in inculcating Democracy Socialism & Secularism National Brotherhood and International Understanding	curriculum & Text books of SCERT, NCERT and any one advanced nations. With reference to the presentation of content on these aspects	

- **References**

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EDU- 09.11 : CURRICULUM AND RESOURCES IN DIGITAL ERA - GEOGRAPHY EDUCATION

Hours of interaction: 60 (Instructional) +30 (Activities / Processes)

COURSE OUTCOME (CO):

- CO 1 To get acquaint with modern principles and trends in the construction and organization of Geography curriculum
- CO 2 To become equipped in retrieving suitable teaching – learning resources
- CO 3 To attain proficiency in IT enabled instructional resources and to become talented in applying innovative strategies and approaches for instructional effectiveness
- CO 4 To generate a broad perspectives of e- resources in instructional practices and to develop skill in retrieving and transacting Geography Curriculum through- e- resources
- CO 5 To develop a positive attitude towards research for curriculum development and to adopt and develop innovative teaching- learning strategies

CONTENTS :

Unit 1 : Curriculum Designing in Geography Education

Unit 2 : School and Community Based Instructional Resources in Teaching Geography

Unit 3 : e- Resources in Teaching and Learning of Geography

Unit 4 : Research Trends in Geography Education

Unit 1 Curriculum Designing in Geography Education (16 hours + 6 hours)

Course Specific Outcome (CSO)	Major concepts	Strategies & Approaches	Assessment
16. To get acquaint with concepts, principles and modern trends in the constriction and organisation of Geography Curriculum 17. To become conversant with NCF and KCF to develop approaches to Geography Education	• Importance and place of Geography in the curriculum • Curriculum – concepts determinants, patterns types, principles and modern trends • Curriculum organisational approaches – spiral /concentric/ topical • An outline of trends, patterns and approaches as suggested in NCF (2005) and KCF (2007) in Geography curriculum formation • Critical analysis of existing HS/HSS Geography curriculum	Analytical approach Debate Seminar Co-operative learning Web Search Lecture cum discussion Prepare reports on NCF/ KCF	• Assessment of learning process and reflections • Prepare a brief sketch of NCF and KCF on Geography curriculum • Seminars • Assignments

Reference

- http://www.ncert.nic.in/html/pdf/schoolcurriculum/framework
- heep://www.ssamis.com/web/downloads/KCF 2007.pdf
- http://www.case.edu/artsci/engl/emmons/writing/pedagogy
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Unit 2: School and Community Based Instructional Resources in Teaching Geography (18 Hrs + 8 Hrs)

Course Specific Outcome (CSO)	Major concepts	Strategies & Approaches	Assessment
18. To identify and to utilize community resources for the effective transaction of Geography curriculum 19. To develop an understanding about the significance of Geography room, library, club, museum, excursion and field visits	• Community resources- meaning nature need significance and methods of utilization • Natural and man- made resources in Geography • Relationship between school and community- bringing them together • Features significance and way of organizing • Geography room, library, club, museum • Exhibition hairs • Exhibitions/ Fairs • Excursion /field visits	Lecture cum discussion Meaningful Verbal learning Online learning Visit to any one of the community resource centres Planetarium Archaeological sites CESS, IMD, SOI, Land USE/ Soil Survey Departments etc Prepare a list of community resources Discuss and present the ways to utilize the community resources	• Field visit /study report • Assignments on utilisation of community resources in teaching- learning of Geography

Reference

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- http://cricap.org
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- Gopill G.H (1966) Teaching of Geography, Macmillan, London
- VermaO.P, and Vedanayagam. E.G (1987) Teaching of Geography, Sterling Publishers Private Limited, New Delhi

Unit 3: E- resources in Teaching and Learning of Geography (16 hours + 6 Hours)

Course Specific Outcome (CSO)	Major concepts	Strategies & Approaches	Assessment
20. To generate a broad perspective of e- resources in Geography instructional practices 21. To develop skill in- retrieving and transacting Geography curriculum through e- resources 22. To identify the use of ICT in the teaching- learning of Geography	• Concept and importance of e- resources, web resources, social networking, Blogs, e- learning, m- learning and web- based learning in Geography • Learning Management systems (LMS virtual library • Virtual library • Application of IT enables instructional resources in Geography online resources, Internet resources video conferencing etc	Online learning Demonstration Narrative expression Web search Internet access Blogging and submission of online assignments	• Use of 4 e-resource to prepare for learning materials • Internal test for units, 1, 2 and 3 CE-I, EDU-09

Reference

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- http://en.wikipedia.org/wiki/learning management system
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- www.youtude.cpm/user/itsvicters
- victors.itschool.gov.in
- Roblyer, M.D (2008) Integrating Educational Technology into Teaching. New Delhi. Pearson Publications
- Rajasekharan.S (2007) computer Education. New Delhi: Neel Kamal Publishers Pvt. Ltd
- En-wikipedia.org/wiki/IT@School-Project
- Alexey Semenov, UNESCO(2005), Information and Communication Technologies in Schools: A Handbook for Teachers
- Atkins. N.J and Atkins. J.N Practical Guide to AV Technologies in Education
- Khan (1977) web based Instruction. Englewood Cliffs: Educational Technology publications
- Madhukumar, Indira (2005). Internet based distance learning. New Delhi: Global Network
- Sagar Krishna (2005). ICT Teacher Training. New Delhi: Global Network

Unit 4 : Research Trends in Geography Education (10 Hrs + 5 Hrs)

Course Specific Outcome (CSO)	Major concepts	Strategies & Approaches	Assessment
23. To develop a positive attitude towards research in the curriculum development process and to utilize the research findings in the teaching learning of Geography	• Need and significance of research in teaching – learning of Geography • Need for developing innovative techniques and strategies in pedagogy and evaluation in Geography • Teacher as a researcher in geography • Action research in Geography need and significance	Group discussion Online learning Group discussion Prepare a paper on research in pedagogical aspects Conduct seminar	• Online assignment (Practical evaluation) • Assignment preparation • Reflections

Reference

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- http://www.edn.playmonth .ac.uk/resined/action research/arhome.htm
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- Leary/ Zina.O (2010) Doing Your Research Report New Delhi: SAGE Publications
- Crowder N.A (1959) Action Research to Improve School Practices. New York: Columbia
- Alan Holmeister& Margaret Lake (1990) Research into Practice USA: Allyn & Bacon
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- Gopill G.H (1966) Teaching of Geography, Macmillan, London
- VermaO.P, and Vedanayagam. E.G (1987) Teaching of Geography, Sterling Publishers Private Limited, New Delhi
- www. Moodle/org
- http://www.cet.nic.in/
- http:llwww.ncert.nic.in

EDU - 10.11 : Techno Pedagogic Content Knowledge Analysis – Geography

Hours of interactions- 60 (instruction) +30 (Activities /Process)

COURSE OUTCOME (CO):

- CO 1 To conscientize the prospective teachers become a techno pedagogue and become aware of the concept TPCK
- CO 2 To grow to be competitive in designing digital texts and e-content in Geography
- CO 3 To familiarise with the networking system for intuitional and professional growth
- CO 4 To get acquainted with the need of creating e- mail and blogs for pedagogical analysis
- CO 5 To prepare the prospective teachers as reflective practitioners

Contents :

Unit 1 Techno- Pedagogic content Knowledge Analysis (TPCK) and self- Instructional Strategies
Unit 2 Net working in Geography Learning
Unit 3 Models of Teaching in Geography
Unit 4 Global Trends in Geography Education

Unit I. Techno-Pedagogic Content knowledge Analysis (TPCK) and self instructional strategies. (16 Hrs +8 Hrs)

Course Specific Outcome (CSO)	Major concepts	Strategies & Approaches	Assessment
To conscientize the prospective teachers become a techno pedagogue To become aware of the concept of TPCK To become capable of analysing contents based on technology To get an awareness on self – instructional strategies	• TPCK- concept, scope, challenges • Inter- relationship with content, pedagogic and technological knowledge • Technological knowledge required for a Geography teachers • Self- instructional strategies Need & Importance CAI & Modular approach	Meaningful verbal learning On-line learning Group discussion TPCK based content analysis Internet access	• Preparing notes • Analysing content based on TPCK • Assignments • Video script developing and uploading

Reference

- http://en.wikipedia.org/wiki/Technological Pedagogical content
- Alexey Semenov, UNESCO, (2005) Information and Communication Technologies in schools: A Hand book for teachers
- Atkins N.J and Atkins. J.S Practical guide to Audio Visual Technologies in Education
- Battacharjeeshymali (2007) Media and Mass communication: An introduction. New Delhi: Kanishka publishers
- Khan, (1997) Web Based instruction, Englewood Cliffs Educational Technology publications
- Madhukumar, Indira (2005) Internet based learning. New Delhi: global Network
- Mayer Richard (2001) Multimedia learning Cambridge University press, UK
- Social Science II text books a std. VIII, IX & X of Kerala
- Techer's Handbook of Std VIII, IX & X Kerala
- Verma O.P, and Vedanayagam. E.G (1987) Teaching of Geography, Sterling Publishers Private Limited, New Delhi
- Arora M.L (1979) Teaching of Geography, Prakash Brothers, Ludhiana

Unit 2 Networking in Geography Learning (12 Hrs + 6 Hrs)

Course Specific Outcome (CSO)	Major concepts	Strategies & Approaches	Assessment
To be aware of designing digital texts and e-content in Geography To familiarise with networking system for institutional & Professional growth	• Institutional networking and professional growth • Current high-tech classroom techniques • Creation of email ID/Blogs • Concept of on-line learning and virtual learning • E- twinning	Discussion Online learning Demonstration Internet access Workshop	• Observation • Report verification • Internal test for units 1 and 2 (EC- EDU.10) • ICT based lesson and uploading as practical works • Internal test for units 1 & 2 (CE-EDU.10)

Reference

- http:// teaching history.org/issues-and research/round table
- www.aptara corp.com/digital-content-problem/e-content development
- www.net.security .org

- cybercoyote.org/security/sage-web.html
- http://en.wikipedia.org/wiki/Technological Pedagogical content
- Alexey Semenov, UNESCO, (2005) Information and Communication Technologies in schools: A Hand book for teachers
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- Techer's Handbook of Std VIII, IX & X Kerala
- Verma O.P, and Vedanayagam. E.G (1987) Teaching of Geography, Sterling Publishers Private Limited, New Delhi
- Arora M.L (1979) Teaching of Geography, Prakash Brothers, Ludhiana

Unit 3 Models of Teaching in Geography (16 Hrs +8 Hrs)

Course Specific Outcome (CSO)	Major concepts	Strategies & Approaches	Assessment
To acquaint with the concept, families and selected items of models of teaching To acquaint with developing lesson transcripts based on selected models of teaching	• Models of teaching- definition, concept, significance, essential elements • Families of models of teaching • Ausubel's meaningful verbal learning • Advance organiser, Inquiry training, Jurisprudential and role playing models	Demonstration Online learning Simulation Scaffolding strategies Lesson transcript preparation Web search	• Discussion lesson • Demonstration lesson • Criticism • (Any 3 lessons on models of teaching) • Practical • Assignments

Reference

- http ://www.guardian c.ul/higher-education-network/
- Joyce,B&weil,M.(2003) Models of teaching (5th Edition) New Delhi: Pentice Hall
- http:// tep uoregon.edu/showcase/crmodel/strategies
- Arora M.L (1979) Teaching of Geography, Prakash Brothers, Ludhiana

Unit 4 Global Trends in Geography Education (17 Hrs + 7 Hrs)

Course Specific Outcome (CSO)	Major concepts	Strategies & Approaches	Assessment
To help the prospective teachers for comparative study of Geography education in a global perspective To be aware the techniques of education for children with special needs	• Geography Education global trends in the 21st century in the developed and developing countries in south –East Asia • Quantitative revolution in Geography • Geography education for children with special needs gifted/ slow learners/culturally- deprived- nature, characteristics and activities	Discussion Web searching Seminars Internet access NCERT Text books Online learning	• Seminars • Reporting • Assignment

Reference

- http/tep.Uorgegon.edu/Showcase/crmodel/strategies
- borich, gary.D(2012).Effective teaching methods: Research based practice. New Delhi Pearson Education
- NCERT Testbooks
- Teachers handbook in social science for Std.VIII, IX & X of Kerala

- Providing teachers effective strategies for using technology techtrends: Brown B&Henscheid
- IstheeratheejiyyathwaMaharah al Tharees :Kamal al Jundi; Dar al Jumhooriyalilthibaa
- Wasaail al Ithisalwathaknologiyafithaaleem :Dr Abd al hafiz muhammedsalama,Dar al Fjkar
- Murshid al Muallim: Richard D. C ; Aalam al Kutub alQahira
- AlThadreesAhdafuhuwausasuhuwaAsaleebuhuThaqweemuNathaijuhuwaThathbeeqathuhu:DrFikriHasanRayan,Aalmalkutub,alqahira
- Thaqniyyathal thaaleem(Mafhoomuhawadouruhafithahseeniamaliyyathalthaaleemwathaallum:BadarSalih
- Kithab al Muallim : Majlis al wilayalilbuhuzuthabaviyyawathadreeb(SCERT)
- Altharbiyawathuruquthadrees:SalihabdulAzeez& AbdulAzeezAbdulMajeed; DaralMaarif,AlQahira
- KaifaThulqiDarsak:Yabhasufiusoolialtharbiyathwathadrees,DaralIlmlilMalayeen,Bairut.
- AlMuwajjahalAmaliliMudarriseeal LughaAl Arabiyya:AbidThoufeeqalHashmi; AlRisalapublishingHouse,Bairoot

SEMESTER II

EDU 09.12 CURRICULUM AND RESOURCES IN A DIGITAL ERA: COMMERCE EDUCATION (60 Hrs + 30 Hrs)

COURSE OUTCOME (CO):

- CO 1 To get acquaint with modern principles and trends in the construction and organization of commerce curriculum
- CO 2 To become systematically correlate instructional practices with life of the community to develop better public relations.
- CO 3 To become equipped in retrieving suitable teaching learning resources
- CO 4 To attain proficiency in IT enabled instructional resources for preparing text book, work book, handbook, source book etc in commerce.
- CO 5 To become talented in applying innovative strategies and approaches for instructional effectiveness.
- CO 6 To develop capability in managing heterogeneous learning set up.
- CO 7 To generate a broad perspectives of e-resources in instructional practices and to develop skill in retrieving and transacting commerce curriculum through e-resources
- CO 8 To develop a positive attitude towards research to develop inquiry skills and scientific investigation
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Contents

Unit 1 **Curriculum Designing in Commerce Education**

Unit 2 **School and Community Based Instructional Resources in Teaching Commerce**

Unit 3 **E- Resources in Teaching and Learning of Commerce**

Unit 4 **Research Trends in Commerce Education**

Unit 1: Curriculum Designing in Commerce Education (15 Hrs + 6 Hrs)

Course Specific Outcome (CSO)	Concepts	Strategies	Evaluation
• To get acquaint with modern principles in the construction and designing of commerce curriculum • To become conversant with NCF and KCF	• Curriculum – Concept, Principles of designing commerce curriculum • Approaches, types of curriculum, Modern trends in designing commerce curriculum. • Brief outline about NCF (2005) KCF (2007) with special reference to vocational education.	• Analytical approach • Debate • Seminar • Co-operative learning	• Group investigation summary reports • Prepare a brief sketch of NCF and KCF

Unit 2 : School and Community Based Instructional Resources in Teaching Commerce (13 Hrs + 7 Hrs)

Course Specific Outcome (CSO)	Concepts	Strategies	Evaluation
• To develop a desire to take active involvement in community affairs • To become systematically correlate instructional practices with life of the community; thereby develop better public relations.	• School and community based teaching – learning resources: school to the community and community to the school. • Co-curricular activities-school bank, commerce club, commerce library, commerce laboratory, commerce room etc.	• Discussion • Project method • Visit to commercial institutions/ industries	• Prepare a list of community recourses-discuss and present the ways to utilize the community recourses • Conduct a field study to any one of the resource centers.

Unit 3: e- Resources in Teaching and Learning of Commerce (18 Hrs + 10 Hrs)

Course Specific Outcome (CSO)	Concepts	Strategies	Evaluation
• To generate a broad perspectives of e-resources in instructional practices	• Concept of e- resources, Web resources, social networking, Educational blogs, e-journals, pod casting, e-learning, m - learning, web based learning. • Learning management system (LMS) in teaching learning of	• Online learning • Demonstration • Narrative expression • Web search	• Use any e-resources to prepare any 4 learning materials**.**

• To develop skill in retrieving and transacting commerce curriculum through e-resources	commerce education. • IT enabled instructional resources: On line resources, videos, YouTube resources, animations, film clippings.		

Unit 4 Research Trends in Commerce Education (14 Hrs +7 Hrs)

Course Specific Outcome (CSO)	Concepts	Strategies	Evaluation
• To develop a positive attitude towards research • To develop inquiry skills and scientific investigation	• An introduction to Research in Commerce Education- Need and importance • Commerce Teacher as a researcher • Strategies and techniques for developing research culture through Commerce education.	• Group Discussion • Brain storming • Education Journal analysis	• Prepare a paper (utilizing internet) on the latest research findings on pedagogical aspects in Commerce and conduct a seminar.

Continuous Evaluation (CE) = 25 Marks

1. **Practicum – 1 : 5 marks**
2. **Reading and Reflecting on texts : 10marks**
3. **Seminar/presentation-1 : 5 marks**
4. **Mid semester exam : 5 marks**

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Leary, Zina O((2010). Doing your research project. New Delhi. SAGE

Obul, Reddy D. (2000). *Re-designing of commerce education in India in the context of changing business environment*, The Journal of Commerce; Vol. 36(3).

Raj, Rani Bansal (1999). Models of teaching and concepts of learning. New Delhi: Anmol Publications.

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Sivarajan, K; Paul, Issac and Lal, E.K (2017). Commerce Education: Methodology of Teaching and Pedagogic Content Knowledge Analysis, Calicut University.

Sue, Cowley (2006) A – Z of Teaching. New York: Brij basi Art Press Ltd. Raj, Rani Bansal (1999). New trends in teaching of Commerce: Models of teaching and concepts of learning. New Delhi: Anmol Publications.

SEMESTER II

EDU 10 .12: TECHNO PEDAGOGIC CONTENT KNOWLEDGE ANALYSIS – COMMERCE (60 Hrs + 30 Hrs)

COURSE OUTCOME (CO):

- CO 1 To conscientize the prospective teachers become a techno- pedagogue and become aware of the concept TPCK
- CO 2 To grow to be competitive in designing digital texts and e-content in commerce disciplines
- CO 3 To become empower in surfing digital resource for transacting commerce curriculum.
- CO 4 To familiarize with the networking system for institutional and professional growth.
- CO 5 To get acquainted with the need of creating e-mail and blogs for pedagogical analysis.
- CO 6 To prepare the prospective teachers as reflective practitioner
- CO 7 To get acquaint with the principles and designing of assessment mechanisms and capable of implement it.
- CO 8 To generate a professional aspiration among young world by preparing for competitive / placement exams
- CO 9 To inculcate a broad perspectives of individualized institution

CONTENTS

Unit 1 Techno Pedagogic Content Knowledge Analysis (TPCK) and Self Instructional Strategies

Unit 2 Networking in Commerce Learning

Unit 3 Models of Teaching in Commerce

Unit 4 Global Trends in Commerce Education.

Unit 1 Techno Pedagogic Content Knowledge Analysis (TPCK) and Self Instructional Strategies (15 Hrs + 8 Hrs)

Course Specific Outcome (CSO)	Concepts	Strategies	Evaluation
• To conscientize the prospective teachers become a techno- pedagogue • To become aware of the concept TPCK • To become capable of analyzing content based on technology	• Inter relationship between Technology, Pedagogy and Content, Teacher as Techno-Pedagogue. • Scope and purpose of Techno-Pedagogic Content Knowledge Analysis. • TPCK based content analysis (Selected units of higher secondary commerce text book) • Developing digital lesson plan and digital magazines.	• Meaningful verbal learning • Demonstration • On line learning • Group discussion	• Prepare a self explanatory note on 'Teacher as a Techno-Pedagogue' • TPCK based Content analysis on any one unit.

Unit 2 Networking in Commerce Learning (13 Hrs + 7 Hrs)

Course Specific Outcome (CSO)	Concepts	Strategies	Evaluation
• To become competent to analyze the ways in which Professional and Institutional growth established through network twinning. • To become skillful while creating e-mail ID and blogs.	• Professional and Institutional growth: Through network-twining - Student and Institution Networking • Online learning: Concept and system of online learning, virtual learning. • Creation of e-mail ID and blogs • Applications of Social Networking systems	• Discussion • Online learning • Demonstration • Workshop • Group investigation	• Concept maps • Observation • Product presentation • Report verification

Unit 3 Models of Teaching in Commerce (18 Hrs + 8 Hrs)

Course Specific Outcome (CSO)	Concepts	Strategies	Evaluation
• To interlock 'models of teaching' in effective instructional practices of commerce education. • To categorize, analyzes and applied the varied instructional models in commerce discipline.	• Models of teaching – Introduction, Operational Heart, Different families • Concept Attainment Model with lesson templates • Inquiry Training Model with lesson templates • Advance organizer model with lesson templates • Cognitive Apprenticeship Model	• Demonstration • Group discussion • Co-operative learning	• Discussion lesson (5- three out of five should be Models of Teaching) • Demonstration (2) • Criticism (5/ 3models of teaching)

Unit 4 Global Trends in Commerce Education (14 Hrs + 7 Hrs)

Course Specific Outcome (CSO)	Content		Evaluation
• To analyze the global trends in commerce education through comparison between India with other countries. • To evaluate the significance of Entrepreneurship Education, Business Education and Accounting Education in modern era.	• Global trends in commerce education – opportunities and challenges • Technological developments in Commerce – e commerce, e banking, online trade and market, digital market, e governance, Mobile Commerce, Augmented Reality for Product Visualization. • Recent developments in computerized Accounting - cloud accounting, automation of accounting, collaborative accounting.	• Discussion • Brain storming • Inductive strategies • Thinking strategies	• Idea presentation grid • Assignment and seminar reports

Continuous Evaluation (CE) = 25 Marks

1. **Practical -1** : **5 marks**
2. **Test-mid semester** : **5 marks**
3. **Subject Association activity** : **5 marks**

4. **Group Practicum (video scripting, recording & uploading): 10 marks.**

References

Aggarwal, J.C. (1996) A Practical Approach. New Delhi : Vikas Publishing House Pvt. Ltd.

Best, John.W& Kahn, James.V. (1999). *Research in Education.* Boston: Allyn and Bacon.

Borich, Gary D (2012). Effective teaching methods: Research based practice. New Delhi: Pearson Education

Leary, Zina O((2010). Doing your research project. New Delhi. SAGE

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Rao, Bhaskara (2005) Curriculum for Learning to Live Together. New Delhi: Discovery Publishing House.

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Sivarajan, K; Paul, Issac and Lal, E.K (2017). Commerce Education: Methodology of Teaching and Pedagogic Content Knowledge Analysis, Calicut University.

Sue, Cowley (2006) A – Z of Teaching. New York: Brij basi Art Press Ltd. Raj, Rani Bansal (1999). New trends in teaching of Commerce: Models of teaching and concepts of learning. New Delhi: Anmol Publications.

EDU-0 9.13 : CURRICULUM AND RESOURCES IN DIGITAL ERA- HOME SCIENCE EDUCATION

(Theoretical discourses - 60 hrs, CE - 30 hrs)
COURSE OUTCOME (CO):

- CO 1 To strengthen the experience of the promising student teachers as curriculum designers, transmitters and assessors
- CO 2 To attain proficiency in IT enabled instructional resources for preparing teaching learning materials in Home Science.
- CO 3 To generate a broad perspectives of e-resources in instructional practices and to develop skill in retrieving and transacting Home Science curriculum through e-resources
- CO 4 To undertake a self empowerment initiative in transacting the Home Science Curriculum from a digital migrant outlook
- CO 5 To provide the required research based science learning experiences so as to undertake a habit of self development through inquiry and investigation

Contents:

Unit 1: Curriculum Designing in Home Science Education

Unit 2: School and Community Based Teaching and Learning of Home Science

Unit 3: E-Resources in Teaching and Learning of Home Science

Unit 4: Research Trends in Home Science Education

Unit 1: Curriculum Designing in Home Science Education (20+4=24 hours)

Course Specific Outcome (CSO)	Major concepts	Strategies & Approaches	Assessment
34. To acquaint with the concepts of curriculum and syllabus 35. To understand and apply the principles of curriculum construction 36. To familiarize with the curriculum organization 37. To familiarize with the recent trends in curriculum construction in state, national and international level 38. To understand correlation of Home Science within the subject as well as with other subjects.	• Curriculum and syllabus-Meaning, Definition, Nature • Principles of curriculum construction. • Types of curriculum-subject centred, activity centred, core curriculum, hidden curriculum • Approaches to curriculum organisation- Concentric approach, Spiral approach, Topical approach, General science and disciplinary approach • Critical analysis of Higher Secondary /Vocational Higher Secondary school curriculum in Home Science prescribed by SCERT. • Trends in curriculum construction- SCERT and curriculum, Critical Pedagogy, Issue based curriculum, Problem Based Learning- Main features. • Correlation- Incidental and systematic, Correlation within the subject, Correlation of Home Science with other subjects such as Biology, Physiology, History, Chemistry, Economics, Commerce, Management studies, and Environmental Education.	Meaningful verbal expression Buzz session PBL Co-operative learning Seminar Group discussion Web Streaming Blog reading	• Questioning • Role performance analysis in Buzz discussion • Concept mapping • Open book analysis

References

- Higher secondary Home Science text book (Plus 1 & Plus 2) prescribed by SCERT, KERALA

- Teacher's source book of Clothing and embroidery text book (Vocational Higher Secondary-Fist & Second year). SCERT, KERALA
- Bunnie Othanel Smith (1950): Fundamentals of Curriculum Development: California, World Book Company.
- Rao, Bhaskara (2005) Curriculum for Learning to Live Together. New Delhi: Discovery Publishing House.
- Singh and Gopal (2004) Teaching Strategies. New Delhi: APH Publishing Corporation.
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- http://www.ncert.nic.in/html/pdf/schoolcurriculum/framework
- http://www.ssamis.com/web/downloads/**KCF** 2007.pdf
- http://www.case.edu/artsci/engl/emmons/writ**in**g/**pedagogy**

Unit 2: School and Community Based Teaching and Learning of Home Science (22+10=32 hours)

Course Specific Outcome (CSO)	Major concepts	Strategies & Approaches	Assessment
39. To acquaint with the concept and significance of community based resources 40. To familiarize various formal and informal learning contexts 41. To identify the contributions of human resources in local community 42. To identify the material supports in learning Home Science	• Community based resources- Meaning , need and significance • Human Resources- resource persons/eminent persons and teachers from different fields of Home Science • Man made resources- Home science Library- importance and organisation, web resources, Home Science laboratory- Importance and organisation, Registers • Community Resources/ Informal learning contexts- Food Processing Units, Social welfare department, ICDS-Balwadi/Anganwadi, Creche and preschool, Institution for special education, Rehabilitation centres, Textile units, Small scale industries and cottage	Narrative expression sessions in small or medium groups Assignment Project Seminar Field trip Organization of Home science Expo Community	• Performance analysis in varius participatory activities. • Quiz programme • presentation • Blog posting • Field trip

	industries. • Material supports- Text book reader, work book, handbook, source book, Reference materials- Encyclopedia, Newsletters, Journals, Learning module • Field trips and excursions- Need and importance • Home Science fairs and exhibition- Significance, organisation and evaluation • Home Science club-Significance, organisation and activities	resource mobilization / Contextual analysis	

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- Begum, F.(2004) *Modern Teaching of Home Science*. New Delhi:Anmol Publications
- Nibedita,D.(2004). Teaching of Home Science. Dominant publishers and Distributors
- Singh and Gopal (2004) *Teaching Strategies*. New Delhi: APH Publishing Corporation.

Unit 3: E-Resources in Teaching and Learning of Home Science (15+7=22 hours)

Course Specific Outcome (CSO)	Major concepts	Strategies & Approaches	Assessment
43. To generate a broad perspectives of e-resources in instructional practices 44. To develop skill in retrieving and transacting Home Science curriculum through e-resources	• Concept of e- resources, Web resources, social networking, Educational blogs, e-journals, pod casting, e-learning, m-learning, and web based learning. • Learning management system (LMS) in teaching learning of Home Science education. • IT enabled instructional resources: On line resources, videos, YouTube resources, animations, film clippings.	Web Streaming Explicit teaching On line learning	• Documentation • Assessment of individual performance • Use of e-resources in preparing learning materials

References

- http://www.bbk.ac.uk/linkinglondon/resources/
- http://en.wikipedia.org/wiki/Learni management_systemhttps://www.itschool.gov.in
- *www.youtube.com/user/itsvicters*
- *en.wikipedia.org/wiki/IT@School_Project*
- *victers.itschool.gov.in/*
- *www.youtube.com/user/itsvicters*

Unit 4: Research Trends in Home Science Education (8+4=12 hours)

Course Specific Outcome (CSO)	Major concepts	Strategies & Approaches	Assessment
45. To develop a positive attitude towards research 46. To develop inquiry skills and scientific investigation 47. To understand the wide scope of	• An introduction to Research in Home Science Education- Need and importance • Home Science Teacher as a researcher	Group discussion on current researches in Home science education	• Performance assessment • On line assignment

employability of Home science learning	• Analysis of Research outcomes in Home Science education both teaching and learning.	Action research Seminar	

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- Dimitris Psillos& Hans Niedderer (2002): Teaching and Learning in the Science Laboratory: Netherlands, Kluwer Academic Publishers.
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- Singh and Gopal (2004) *Teaching Strategies*. New Delhi: APH Publishing Corporation.
- Harms N. &Yager R. (1981): *What Research Says to the Science Teacher* (Vol. 3): USA, National Science Teachers Association.

EDU- 10.13 : TECHNO-PEDAGOGIC CONTENT KNOWLEDGE ANALYSIS – HOME SCIENCE

(Theoretical discourses - 60 hrs, CE - 30 hrs)
COURSE OUTCOME (CO):

- CO 1 ToundertakeaselfempowermentinitiativeintransactingtheHomeSciencecurriculumfromaTechno-PedagogicalContentKnowledgeperspective
- CO 2 To get acquainted with different aspects of collaborative use of information and communication technology
- CO 3 To gain a perspective of basic theories and guiding plans for effective transaction of Home Science
- CO 4 To understand the nature and importance of Home Science from a global perspective

Contents:
Unit 1: Techno-Pedagogic Content Knowledge and Self Instructional Strategies
Unit 2: Networking in Home Science Learning
Unit 3: Models of Teaching in Home Science
Unit 4: Global Trends in Home Science Education

Unit 1: Techno-Pedagogic Content Knowledge and Self Instructional Strategies (11 +6 =17 hrs)

Course Specific Outcome (CSO)	Major concepts	Strategies & Approaches	Assessment
48. To conceptualize the basic principles of Techno-Pedagogic Content Knowledge Analysis in Home Science Teaching and Learning 49. To identify the role of science teacher as a techno-pedagogue 50. To understand various Self Instructional Strategies	• Techno-Pedagogic Content Knowledge Paradigm-Interrelationship of Content Knowledge, Pedagogic Knowledge and Technological Knowledge, scope and purpose • TPCKA based content analysis- Higher Secondary /Vocational Higher Secondary Home Science text book • Science teacher as a techno-pedagogue. • Techno-pedagogic competencies, • Self Instructional Strategies- Meaning, Types- Programmed Instruction ,Modular Instruction, Personalized System of Instruction, CAI and CMI	Small group discussion Web searching demonstration Power Point Presentations Seminar On line learning	• Participant observation • Development of video script • On-task behaviour in class • Reflective journal • (Technological skill practice in classrooms)

References

- AACTECommittee(2008):HandbookofTechnologicalPedagogicalContentKnowledge(TPCK)forEducators:Washington,DC,Rutledge/Taylor&Francis
- MangalS.K.&UmaMangal(2009): Essentialsof EducationalTechnology:NewDelhi,PHILearningPvtLtd.
- http://en.wikipedia.org/wiki/Technological_Pedagogical_Content

Unit 2: Networking in Home Science Learning (15+11 = 26 hrs)

Course Specific Outcome (CSO)	Major concepts	Strategies & Approaches	Assessment
51. To grow to be competitive in designing digital texts and e-content in Home science Education 52. To become empower in surfing digital resource for transacting Home Science curriculum.	• Professional and Institutional growth: Through network-twining • Student and Institution Networking • Online learning: Concept and system of online learning, virtual learning. • Creation of blogs. • Applications of Social Networking systems	Discussion Online learning Demonstration Workshop Group investigation	• Digital document analysis • Blog posting • Debate • Online test • ICT based lesson designing and uploading in blog (1)

References

- http://teachinghistory.org/issues-and-research/roundtable
- *www.5learn.co/**e-content-development***
- www.aptaracorp.com/digital-**content**-production/**econtent-development**
- *www.ntu.edu.sg/home/sfoo/publications/2002/02ecdl_fmt.pdf*
- www.net-security.org

Unit 3: Models of Teaching in Home Science (18 +10 =28 hrs)

Course Specific Outcome (CSO)	Major concepts	Strategies & Approaches	Assessment
53. To understand the application of major psychological theories in learning. 54. To understand various models of teaching and their practice.	• Psychological theories for learning science- A brief introduction of Piaget, Bruner, Gagne, Vygotsky and Ausubel, Gardener's Multiple Intelligence Theory • Models of teaching – Introduction, definition, elements and families of models of teaching • Concept attainment model • Inquiry training model • Constructivist learning model • Advance organizer model • Group investigation model	Meaningful verbal expression Group discussion Peer tutoring Observation Brain storming Video analysis	• Analysis in group discussion • Class test • Discussion lessons (5, Three lessons out of five based on models of teaching) • Demonstration lessons (2) • Criticism lessons (5, Three lessons out of five based on models of teaching) - Performance, observation and recording

References

- BhattacharyaS.P.(1994):ModelsofTeaching:NewDelhi,RegencyPublications.
- BruceR.Joyce,MarshaWeilandEmilyCalhoun(2011):ModelsofTeaching(7thEd.):USA,PearsonEducation

Unit 4: Global Trends in Home Science Education (12 +8 = 20hrs)

Course Specific Outcome (CSO)	Major concepts	Strategies & Approaches	Assessment
55. To understand Global trends in relation to House Science Education	• Home Science education in the global scenario • Home Science towards community Science- women entrepreneurships,	Web streaming Documentation	• Document analysis • Blog posting • Involvement in subject association activity

	Gender equality, extension and communication management system of selected developed and developing countries (USA,China, Japan) with special reference to • Brief history, approaches, organizational structure, linkage to research extension methods used and its comparative analysis with Indian system.	Invited lectures	• Video script: Development, enacting, recording and uploading) • Script writing for radio talk on a topic in home Science

References

- http://jit.sagepub.com/tips/cross.dt
- www.sagepub.com/journalsindex.nav
- www.librarything.com/tag/clothing-cached
- Cernea MM, Russel JFA & Coulter J.K (Eds). 1983. Agricultural Extension by Training and visit-The Asian experience. The world bank D.C
- Dantwala M.L & Barmeda J.N 1990. Rural Development Approaches and Issues, Indian Ag.Dev. since independence. Oxford & IBH
- Gupta C.B.& Srinivasan NP.2000. Entrepreneurship Development in India. Sultan, Chand & sons
- AACTECommittee(2008):HandbookofTechnologicalPedagogicalContentKnowledge(TPCK)forEducators:Washington,DC,Rutledge/Taylor&Francis
- BhattacharyaS.P.(1994):ModelsofTeaching:NewDelhi,RegencyPublications.
- BruceR.Joyce,MarshaWeilandEmilyCalhoun(2011):ModelsofTeaching(7thEd.):USA,PearsonEducation
- FrankRennie&TaraMorrison(2013):E-LearningandSocialNetworkingHandbook(Second Edition):NewYork,Routledge.
- FrankRennie,TaraMorrison(2013):e-LearningandSocialNetworkingHandbook:ResourcesforHigherEducation:NewYork,Taylor&Francis.
- JanieGrossStein,RichardStein(Ed.)(2001):NetworkofKnowledge:CollaborativeInnovationinInternationalLearning:Toronto,Canada,UniversityofTorontoPressIncorporated
- MangalS.K.&UmaMangal(2009):Essentialsof EducationalTechnology:NewDelhi,PHILearningPvtLtd.

EDU – 201.2 : Health and Physical education

(2 credits – 60 hours & 50 marks)

COURSE OUTCOME (CO):

- CO 1 To acquire knowledge about the Track and Field events.
- CO 2 To become familiar with major and minor games and to develop interest in sports and games
- CO 3 To understand the ability to organize and conduct sports and games
- CO 4 To understand the importance and values of recreational activities in the modern society
- CO 5 To understanding of the psychological, sociological, and physiological significance of play & recreation.

Contents

Unit – 1 Track & Field or Athletic events – general awareness, rules and regulations, organization.

Unit – 2 Major and minor games – types, rules and regulations

Unit – 3 Tournaments – knock out and league, fixtures for tournaments

Unit - 4 Play &Recreation – need and importance, leisure time management, practice.

Unit – 5 Mental Health – meaning, problems and techniques.

Unit – 6 Practice of yoga-surya namaskar.

Unit – 1: Track & Field or Athletic events – general awareness, rules and regulations, organization.

Course Specific Outcome (CSO)	Major concepts	Strategies & Approaches	Assessment
56. Acquire knowledge about the track and Field events	**Track and field or Athletic events.- 8 hours** • General awareness on athletics • Rules and regulations of any one event in detail	Oral presentation Group activity Participation	• Group assessment • Organizing sports meet • Participation

Unit – 2: Major and minor games – types, rules and regulations

Course Specific Outcome (CSO)	Major concepts	Strategies & Approaches	Assessment
57. Become familiar with major and minor games and to develop interest in sports and games	**Major and Minor games – 8 hours** • Understanding major and minor games • rules and regulations of any one major game in detail	Theoretical orientation Virtual learning platforms	• Group assessment • Intramural competitions

Unit – 3: Tournaments – knock out and league, fixtures for tournaments

Course Specific Outcome (CSO)	Major concepts	Strategies & Approaches	Assessment
58. Understand the ability to organize and participate in the conduct of sports and games	**Tournaments – 6 hours** • Knock out, league and combination tournaments • Method of drawing fixtures under knock out and league tournaments	Meaningful verbal expression Group activity sessions in small and medium group	• Group assessment • Assignments
59. To familiarize the ways and measures to draw a standard athletic track.	**Track and field marking – 8 hours** • standard 400 mts/200 mts Track marking • Field marking	Verbal presentation Group activity Field work	• Field analysis through group performance.

Unit – 4: Play &Recreation – need and importance, leisure time management, practice.

Course Specific Outcome (CSO)	Major concepts	Strategies & Approaches	Assessment
60. Understand the importance and values of recreational activities in the modern society 61. Understanding of the psychological, sociological, and physiological significance of play & recreation 62. Practice recreational games	**Play &Recreation – 10 hours** • Need & Importance of Play & Recreation • Play theories • Values associated with practice of play & Recreation • Leisure time Management • Recreational Games • Practice of Recreational activities	Theoretical orientation Demonstration Group activity	• Group assessment

Unit – 5: Mental Health – meaning, problems and techniques.

Course Specific Outcome (CSO)	Major concepts	Strategies & Approaches	Assessment
63. Understanding the importance of mental health and normal mental health problems to be addressed in general population 64. Get acquaint with the relaxation techniques to overcome mental health problems	**Mental Health – 8 hours** • Introduction and overview of mental health • Mental health problems • Techniques to improve mental health	Narrative expressions Demonstration Practical sessions	

Unit – 6: Practice of yoga-surya namaskar.

Course Specific Outcome (CSO)	Major concepts	Strategies & Approaches	Assessment
65. Understands the importance of surya namaskar as an exercise and practices.	**Practice of Yoga.- 12 hours.** • Surya Namaskar – Sun Salutation for mental, emotional, physical and spiritual well being.-significance in education. • Meaning – Steps of Surya Namaskar. • Pranamasan • Hasta uttanasana • Pada hasthasana • Ashwa-sanchalan-asana • Parvatasana • Ashtanga namaskar • Bhujangasana • Parvathasana • Ashwa-sanchalan-asana • Pada hastasana • Hasta uttanasana • Pranamasan.	Narrative expressions Demonstration Practical sessions	• Practice. • Individual performance assessment.

Guidelines for Practical work

- Physical Education Record - 10 marks
- Winning prizes in sports and games - 5 marks
- Participation in sports and Games - 10 marks
- Initiative and Effort in organizing sports and games - 5 marks
- Internal written examination - 10 marks
- Practice of Yoga - 10 marks

EDU – 201.3: ART EDUCATION AND THEATRE PRACTICE

(Credit – 1, carries 25 marks/30 hours)

Contents:

Theatre practice in curriculum transaction-

- Workshop to develop simple drama/ skit -Discussion about script writing on selected topic in the optional subject-theatre practice.
- Puppetry –types - use in classroom transaction – demonstration/video presentation.
- Role plays/ Mono act for transaction of different subjects-discussion and presentation.

Practicals:

- Prepare report on the importance of theatre practice in Education with selected examples. (maximum 15 pages) – 10 marks.
- Writing of script for a small drama/ skit by selecting a topic in your subject (individual/group) - 15 marks.