

SEMESTER – I

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

Perspectives in Education/Core Subjects:

- EDU-01 : Knowledge and Curriculum: Philosophical and Sociological Perspectives.**
- EDU-02 : Developmental Perspectives of the Learner.**
- EDU-03 : Technology and Communication in Education.**

Curriculum and Pedagogic Courses/Optional subjects:

- EDU-04. 1-13 : Theoretical Base ofEducation.**
- EDU-05. 1-13 : Pedagogic Content Knowledge Analysis :**

EDU - 01: KNOWLEDGE AND CURRICULUM: PHILOSOPHICAL AND SOCIOLOGICAL PERSPECTIVES.

Hours to transaction:60 (Theoretical discourses)&CE - 30 hrs (Activities/Process)

Objectives:

- **To recognise broad functions of education and role of teacher as a leader**
- **To develop personal philosophy of teaching**
- **To synthesise eclectic tendencies in teaching**
- **To understand the sociological functions of education**
- **To synthesise the role of teacher as a change agent and nation builder**
- **To synthesise the role education in promoting national integration and peaceful coexistence**

Contents:

- UNIT I : TEACHER AND EDUCATION (15hrs)
 UNIT II : PHILOSOPHICAL PERSPECTIVES OF EDUCATION (30 hrs)
 UNIT III : SOCIOLOGICAL PERSPECTIVES OF EDUCATION (25 hrs)
 UNIT IV : EDUCATION AND SOCIAL CHANGE (20 hrs)

UNIT I : TEACHER AND EDUCATION (15 hrs)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To develop the broad concept of education 2. To understand Meaning, definitions and Aims of education 3. To develop awareness on types and agencies of education 4. To realise qualities and competencies and professional Ethics of teachers	<ul style="list-style-type: none"> • Meaning and concept of Education • General Aims of education • Definitions of Education • Formal, informal, and non-formal education • Child centered and life centered education • Teacher- Qualities and Competencies • Teaching- An Art and Science • Professional Ethics of Teachers 	Meaningful verbal expression Lecture-discussion ICT Group Discussion	<ul style="list-style-type: none"> • Role Performance Analysis in group Discussion • Involvement in Debates • Seminar Presentations • Assignments • Class test

REFERENCES :

- Agarwal. J.C (2008). Education in the emerging Indian Society. Shipra Publications
- Anand, C.L. et.al. (1983). Teacher and Education in Emerging in Indian Society, NCERT, New Delhi.
- Sharma R.A. (1993). Teacher Education: Theory, Practice and Research. Meerut : International Publishing House
- Zhijian, L.The multirole of Teacher: Retrived July 10, 2012, fromWuhan university of science and engineering: <http://www.seiofbluemoutain.com>
- <http://www.ncert.nic.in/>
- <http://teaching.about.com>
- <http://www.ncte-india.org>.

UNIT II: PHILOSOPHICAL PERSPECTIVES OF EDUCATION(30 hrs)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To develop personal philosophy of teaching 2. To develop an awareness and attitude towards eclectic tendencies in education 3. To analyse the contributions of thinkers towards education	<ul style="list-style-type: none"> • Relationship between Philosophy and Education • Thoughts on Education - Idealism – Naturalism-Pragmatism -Realism - Humanism- features and educational implications • Contributions of thinkers towards curriculum <ul style="list-style-type: none"> -Methods of teaching by Froebel and Montessori -Stage wise curriculum suggested by Plato -Aritotle-concept of realism-taxonomy of living organisms -Project method and experimental school suggested by Dewey • Indian Thinkers-Vivekananda-S.Radhakrishnan, Gandhiji – Tagore, Aurobindo • Eclectic tendencies in education 	Meaningful verbal expression Lecture-discussion ICT Seminar Debate	<ul style="list-style-type: none"> • Participation and Performance in Quiz Competition • Seminar Presentations • Class test • practicum

REFERENCES :

- Brubacher John. S (1962). Modern Philosophies of Education. New Delhi: Tata McGraw,
- Butter J. Donald (1951). Four Philosophies and Their Practice in Education and Religion New York: Harper and Brothers Publishers
- Chatterjee.S (2012). Principles and practices of modern Education. Arunabha sen book(p) ltd. Kolkatta.
- Dewey John (1938). Experience and Education. New York: Macmillan.
- Gandhi m.k. (19037). basic education, navajivan publishing house, Ahmedbad
- George Thomas (2004) Introduction to Philosophy, Delhi, Surjeet Publication
- <http://www.mu.ac.in>
- Rai B.C (1997), Theory of education,. Prakasan Kendra. Lucknow
- UNESCO. (2004) Education for All: The Quality Imperative. EFA Global Monitoring Report. Paris.
- <http://www.unesco.org/>
- <http://www.indianphilosophy.50webs.com/advaita.htm>
- http://www.mu.ac.in/myweb_test/MA%20Education-Philosophy/Chapter-2.pdf
- [http://vpmthane.org/Publications\(sample\)/Indian%20Philosophy](http://vpmthane.org/Publications(sample)/Indian%20Philosophy)

UNIT III: SOCIOLOGICAL PERSPECTIVES OF EDUCATION (30 hrs)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To identify the interactive role of education and society 2. To develop an understanding about the role of education with regard to culture 3. To synthesis role of curriculum to inculcate national integration and international understanding	<ul style="list-style-type: none"> • Interactive role of education and society • Functions of education with regard to Culture –Preservation, Transformation and Transmission • Acculturation and Enculturation, Cultural lag, cultural inertia, Cultural diffusion • Role of education to inculcate values connected with Democracy and Secularism • National Integration • International Understanding 	ICT enabled group discussion Field trip Lecture-discussion	<ul style="list-style-type: none"> • Document Analysis • Field visit reports • Class test • Role Performance • Analysis in group Discussion • Seminar Presentations

REFERENCES:

- Agarwal J.C.(1991). Theory and [practices of education. Vikas publishing house Pvt Ltd. New delhi.
- Dash BN(2002). Teacher and education in the emerging Indian Society. Vol.2. Neelkamal publication. Hydrabad.
- Arora G.L & Pranati Panda.Fifty Years of Teacher Education in India (Post Independence Developments):NCERT
- Chinara B.(1997). Education and Democracy, APH. New Delhi.
- John, Zeepa Sara. (2012) Philosophical and Sociological Foundations of Education. Chennai: Almighty Book Company,
- Mukherji SM.(1966). History of education in india, charya book depot, baroda..
- <http://www.mu.ac.in/>
- <http://www.yazour.com/>

UNIT IV: EDUCATION AND SOCIAL CHANGE (20 hrs)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To analyze and synthesize the sociological functions of education 2. To develop awareness about the characteristics of Indian society. 3. To synthesize the significance of Education as an agent of social change	<ul style="list-style-type: none"> • Characteristics of Indian Society –class, religion, ethnicity, language. • Social Change – Factors influencing social changes- Role of Education • Major changes occurred in Indian society • Conscientisation - Areas where conscientisation is needed • Role of education to curb Social evils like Corruption, Terrorism, Antinational activities, Violence against women, Drug abuse and Alcoholism etc. • Teacher as a Change agent and Nation builder 	Lecture Cooperative Learning Discussion Social Constructivism	<ul style="list-style-type: none"> • Initiation and performance in dramatization • Field visit reports • Role Performance Analysis in group Discussion • Involvement in Debates • Seminar Presentations • Class test • Practicum

REFERENCES :

- Elder, Joseph W. (2006), "Caste System", Encyclopedia of India (vol. 1) edited by Stanley Wolpert, 223–229, Thomson Gale: ISBN 0-684-31350-

- Freire, P. (1972). *Pedagogy of the Oppressed*. Harmondsworth: Penguin
- Raman, S.A. (2006). "Women's Education", *Encyclopedia of India* (vol. 4), edited by Stanley Wolpert, 235–239, Thomson Gale: ISBN 0-684-31353-7
- Saraswathi, B(1998). *The cultural dimension of education*. New delhi, indira Gandhi national center for the arts
- http://en.wikipedia.org/wiki/Terrorism_in_India
- <http://library.thinkquest.org/>
- <http://en.wikipedia.org/>
- <http://en.wikipedia.org/>

EDU - 02: DEVELOPMENTAL PERSPECTIVES OF THE LEARNER

Objectives: To enable the student teacher:

1. To conceptualise the nature, scope and methods of Educational psychology.
2. To familiarise the approaches for the study of Educational Psychology
3. To develop an understanding of the concept, principles and theories of Growth and development.
4. To familiarise the developmental tasks and developmental hazards
5. To understand the developmental characteristics of Childhood and Adolescence.
6. To develop an understanding of the concept, nature and various theories of intelligence
7. To understand the meaning, nature, process of creativity development and the strategies for fostering creativity.
8. To develop an understanding of the concept and theories and development of Personality.
9. To understand the concept of Adjustment, Maladjustment and the causes of mal-adjustment.
10. To equip student teachers to apply the theories in facilitating overall development of the learner

Contents:

- UNIT I : FOUNDATIONS OF EDUCATIONAL PSYCHOLOGY**
UNIT II : DEVELOPMENT OF THE LEARNER
UNIT III : LEARNER DIFFERENCES IN INTELLIGENCE AND CREATIVITY
UNIT IV : PERSONALITY OF THE LEARNER

UNIT I FOUNDATIONS OF EDUCATIONAL PSYCHOLOGY (15 hours (10 T+ 5 P))

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To develop an awareness about the need for educational psychology for a teacher 2. To develop an understanding of the nature, scope and methods of Educational psychology.	1. Educational Psychology- Meaning, Scope, Limitations and relevance in classrooms 2. Schools of Psychology- Structuralism, Functionalism, Behaviourism, Cognitive, Humanistic and Gestalt Schools 3. Scientific method of studying behavior,	Lectures Group discussion on Critical analysis of application of psychology	<ul style="list-style-type: none"> • Reflective practices • Assignments • Seminar presentation • Test paper • Performance in discussions

3. To understand various approaches to study Psychology. 4. To familiarise the different schools of Psychology 5. To familiarise the various branches of psychology	Methods of studying Educational Psychology- Introspection, Observation, Experimentalmethod and Case Study	Comparison of different schools of psychology Case study Self analysis	
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Reference

- Chauhan, S.S (2006) Advanced Educational Psychology New Delhi :Vikas Publishing House.
- Woolfolk, Anita (2004), Educational Psychology (9th ed.) India: Pearson Education
- Mangal, S.K (1997) Advanced Educational Psychology New Delhi Prentice Hall of India

UNIT II DEVELOPMENT OF THE LEARNER (30 hours (20 T +10 P))

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To develop an understanding of the concept, principles and theories of Growth and development. 2. To familiarise the different aspects of development and developmental tasks and developmental hazards 3. To understand the developmental characteristics of Childhood and Adolescence. 4. To critically evaluate the contributions of various theories	<ul style="list-style-type: none"> • Growth and Development: Concept and Principles, Developmental tasks and Developmental hazards • Theories of development- Piaget’s theory of Intellectual development, Erickson’s theory of Psycho social development and Kohlberg’s theory of Moral development • Developmental characteristics with special reference to childhood and adolescence <ul style="list-style-type: none"> ▪ Physical and motor development ▪ Cognitive development ▪ Language development(Noam Chomsky, Vygotsky) 	Group discussion to compare the characteristics of childhood and adolescence Seminars on the highlights of various theories Lecturing Child study	<ul style="list-style-type: none"> • Reflective practices • Performance in group discussions • Assignments • Seminar presentation • Test paper • Child study reports • Communicative skills • Self study reports

<p>of development</p> <p>5. To conceptualise the role of teacher in facilitating development of the learner</p>	<ul style="list-style-type: none"> ■ Emotional development ■ Moral& social development- ● Role of teacher in fostering development of the learner. 	<p>Application of different methods for understanding adolescent problems</p> <p>Analysis of theory and its application in different contexts</p>	
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Reference

- Hurlock, B. Elizabeth(2003)., Developmental Psychology NewDelhi: Mcgraw-Hill
- Berk, L.E (2012) Child Development (6th Ed .)New Delhi: Prentice Hall of India, Witting A F,(2001) Developmental Psychology, A life span Approach, New Delhi: Mc. Graw Hill
- Penuington, D, et.al (2010) Advanced Psychology: Child Development, Perspectives and Methods, London: Hodder &Stoughton

Unit Iii: Learner Differences in Intelligence and Creativity (25 Hours(17 T+ 8 P))

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
<p>1. To conceptualise the individual difference among the learners on the basis of intelligence and creativity</p> <p>2. To develop an understanding of the concept, nature and various theories of intelligence</p> <p>3. To understand the meaning, nature, process of creativity development and the strategies for fostering</p>	<ul style="list-style-type: none"> ● Meaning and nature of intelligence ● Theories of Intelligence – two factor, group factor, multi factor, Guilford’s structure of intellect model - Multiple intelligence etc. ● Measurement of Intelligence –verbal, nonverbal and performance tests ● Emotional intelligence, Social Intelligence, Spiritual Intelligence- Meaning and Scope ● Creativity- meaning and nature - 	<p>Lectures</p> <p>Group discussion</p> <p>Administer any one intelligence test and familiarize the procedure.</p> <p>Prepare activities based on the multiple</p>	<ul style="list-style-type: none"> ● Practical work ● Assignments ● Seminar presentation ● Test paper ● Performance based assessment

<p>creativity.</p> <p>4. To familiarise the measurement of intelligence and creativity</p>	<p>Identification of Creative Learner - Process of Creativity , measurement of creativity, Teacher's role in fostering Creativity.</p>	<p>intelligence theory</p> <p>Prepare sample items for verbal creativity tests (minimum 4 items)</p> <p>Develop an activity to foster creativity in the classroom</p> <p>Design of Strategies for promoting emotional, social and spiritual intelligence among students</p>	
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Reference

- Dwyer, D. & Scampion, J (1995): Psychology A- Level: Great Britain: Mcmillan.
- Barochisky, G.B Poeytes Book (1984) Intelligence Procedures in Psychology, Philadelphia
- Gates, A.S and Jersild, A.T (1970) Educational Psychology, New York : Macmillian
- Teele, Sue (2000), Rainbow of Intelligence: Exploring how students Learn, California: Corwin Press Inc.

Unit IV Personality Of The Learner (20 Hours (13t+ 7 P))

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
<p>1. To conceptualise the individual difference among the learners on the basis of Personality</p>	<ul style="list-style-type: none"> • Concept of Personality- role of heredity and environment, • Approaches to study personality - Psycho 	<p>Lectures</p> <p>Case study of unique</p>	<ul style="list-style-type: none"> • Reflective practices • Assignments • Seminar presentation

<ol style="list-style-type: none"> 2. To develop an understanding of the concept of adjustment 3. To understand the factors causing maladjustment 4. To familiarise the personality tests 5. To conceptualise mental health and mental hygiene 	<p>analytic theory (Freud), - Type theory, Trait Theory (Allport)</p> <ul style="list-style-type: none"> • Characteristics of mature personality. • Assessment of personality- techniques and methods- projective techniques • Adjustment and Maladjustment, Adjustment mechanisms. 	<p>personalities</p> <p>Group discussion to identify the characteristics of mature personality</p> <p>Administer any one personality test and familiarize the procedure</p> <p>Conduct a discussion on teacher's role in identifying and managing maladjusted learner</p> <p>Discussion on mental health programmes</p> <p>7. Action research on adjustment patterns</p>	<ul style="list-style-type: none"> • Test paper • Practical works
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Reference

- Allport, G.W (1937) Personality: A Psychological Interpretation Henry Holt & Co. New York.
- Cattell, R.B (1959) Personality and Motivation : Structure and Measurement, M.B. Graw Book Company, New York
- Guilford JP (2007) Personality, : New Delhi: Surjeet
- Dash, M. & Dash, N. (2006) Fundamental of Educational Psychology: New Delhi: Atlantic Publishers and Distributors
- Aggarwal, J.C (1994) Essentials of Educational Psychology New Delhi :Vikas Publishing House
- Berk, Laura E, (2003). Child Development (6th ed). New Delhi :Prentice Hall of India.

- Craig J Grace (1983) Human Development Prentice Hall, INC, Eagle Wood Cliffe, New Jersey.
- Crow, L.A and Crow A Educational Psychology (1973) New Delhi : Eurasia Publishing House.
- Devas, R.P., Jaya N. (1984). A Text Book on Child Development. Bombay :McMillan India Ltd.
- Dinkmeyer.C.D(1967) Child Development,. New Delhi, Prentice Hall of India Pvt.Ltd.
- Dunn,R.,&Dunn,K.(1978).Teaching students through their individual learning styles. Reston,V.A.: Reston Publishing Company,Inc.
- Duric, L (1990)Educational Psychology New Delhi : Sterling Publishers.
- Elliott, A.J (1981) Child Language Cambridge University Press
- Entwistle,N.J.(1981). Styles of learning and teaching.NewYork:John Wiley.
- Entwistle,N.J.(1987). Understanding classroom learning. London:Hodder&Straughton.
- Hilgad, E.R. And Bower, G.H., (1977). Theories of Learning. New Delhi :Prentice Hall of India Ltd.
- Hurlock E.B (1995) Development Psychology A Life Span Approach. New Delhi : Tata Mc Grow Hill Publishing Co.
- Jangira, N.K., etal (1991). Functional Assessment Guide. New Delhi : NCERT.
- Musser, P.H, Conger, S and Kagar, P (1964) Child Development and Personality, New York : Harper Row
- Nisha, Maimun (2006); Milestones of Child Development; New Delhi: Kalpaz Publications
- Reilly, P.R & Levis, E (1983) Educational Psychology New York :Macmillian Publishing Co Ltd.
- Schunk, D.H(2011)Learning Theories an Educational Perspective, New Delhi, Pearson Education.
- Skinner .E.C(2003) Educational Psychology, New Delhi, Prentice Hall of India Pvt.Ltd.
- Umadevi, M.R.,(2009) Educational Psychology: Theories and Strategies for Learning and Instruction, Bangalore, Sathkruthi Publications
- Wolman, P.B (Ed) (1982) Hand Book of Developmental Psychology Prentice Hall : Engle Wood Cliffs, New Jersey

Websites

- <http://www.libraries.psu.edu/>
- <http://www.teacher.net>
- <http://teamwork.sg/teamwork/schoolportal.aspx>
- <http://www.enhancelearning.co.in/SitePages/Index.aspx>

EDU - 03 : TECHNOLOGY & COMMUNICATION IN EDUCATION

(Theory 60 hours+ Practical 30 hours)

Objectives

- To develop an understanding of the concepts in educational technology and communication.
- To empower prospective teachers through the blending of technological aspects with pedagogical principles.
- To acquaint the prospective teachers with the application and use of e-resources, free and open source software.
- To explore the creative avenues in technological advancements for improving the teaching learning process.
- To familiarize with the concept of teacher as a Techno pedagogue.
- To create an awareness regarding teacher as a content creator.
- To explore creative avenues for enriching classroom teaching learning process
- To create a zinc with man, machine and material with regard to technological resources

Contents :

Unit I : Introduction to Educational Technology (Theory 20hours & Practical 2 hours)

Unit II : Communication Technology (Theory10 hours)

Unit III : ICT in Education (Theory 20 hours & Practical25 hours)

Unit IV : Students Safety on the net (Theory10 hours& Practical 3 hours)

UNIT I : INTRODUCTION TO EDUCATIONAL TECHNOLOGY (THEORY 20 HOURS & PRACTICAL 2 HOURS)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
A. Educational Technology			
1. To provide a smooth entry into the field of educational technology	<ul style="list-style-type: none"> • Educational technology- concept, objectives and scope. 	Narrative session	<ul style="list-style-type: none"> • Evaluation based on documentation
2. To differentiate between teaching and instructional technology	<ul style="list-style-type: none"> • Difference between technology in education (Instructional technology) and technology of education (teaching technology) 	Direct instruction Verbal interaction	<ul style="list-style-type: none"> • Participant observation

3. To set a perspective on different approaches of technology	<ul style="list-style-type: none"> Approaches of educational technology – Hardware Software and Systems approach 	Interactive session Meaningful verbal expression	<ul style="list-style-type: none"> Evaluating the level of participation
4. To familiarize with various agencies and services in the in the field of educational technology	<ul style="list-style-type: none"> Resource centres and services in educational technology CIET (NCERT) SIET EMMRC UGC-CEC C-DIT EDUSAT NME-ICT NPTEL IT@SCHOOL VICTERS CHANNEL AKSHAYA PROJECT GYAN DARSAN INFLIBNET 	Viewing programmes Class discussion Class seminar Assignment	<ul style="list-style-type: none"> Assessing students report Participation in the seminar Evaluating the assignments
B. Media in Education			
1. Creating awareness provision for effective use of aids in teaching and learning	<ul style="list-style-type: none"> Print media- Newspapers Books Journals Magazines 	Group discussion Small group session	<ul style="list-style-type: none"> Participation in group discussion Role performance analysis
2. To realize the relevance of mass media in education	<ul style="list-style-type: none"> Non print media- mass media(radio, T.V., Films in education) 	Group discussion General discussion Seminar	<ul style="list-style-type: none"> Participation in group discussion Presentation skill
3. Develops the ability to choose the most suitable learning aid while preparing the teaching lesson	<ul style="list-style-type: none"> A-V aids: definition, types audio aids visual aids A-V aids. 	Group discussion Narrative expression Seminar	<ul style="list-style-type: none"> On task behaviour in class Participation in group Presentation skill

4. To differentiate between multimedia and multisensory approach	<ul style="list-style-type: none"> • Meaning & concept of Multimedia and Multi sensory approach- 	Meaningful verbal expression	<ul style="list-style-type: none"> • Participatory behaviour
5. To familiarize with the classification of A-V aids	<ul style="list-style-type: none"> • Dales cone of experience 	Meaningful verbal expression	<ul style="list-style-type: none"> • Participation in class activity
6. To familiarize with teleconferencing and its application in classroom	<ul style="list-style-type: none"> • Teleconferencing: • Audio • Video 	Techno-lab activity Demonstration Meaningful verbal expression	<ul style="list-style-type: none"> • Participation in the learning process • Involvement in class activity
7. To familiarize with the latest educational technology equipment 8. Develop skill in using interactive white boards	<ul style="list-style-type: none"> • Interactive white board- uses & advantages over normal chalk board 	Demonstration Hands on experience	<ul style="list-style-type: none"> • Participation • Skill assessment
9. To familiarize with the strategy for digital education in classrooms	<ul style="list-style-type: none"> • Smart Classrooms 	Class discussion	<ul style="list-style-type: none"> • Participation in the class activity

Unit II. Communication Technology (Theory 10 hours)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To introduce the concept of communication 2. To familiarize with the various types of communication	<ul style="list-style-type: none"> • Communication-: concept, scope types – verbal, non verbal. Style purpose- face to face, formal and informal, one way- two way. 	Group discussion Documentation	<ul style="list-style-type: none"> • Role performance analysis in group discussion • Evaluation of documentation
3. To identify different components of classroom communication	<ul style="list-style-type: none"> • Communication cycle- components of classroom communication 	Group discussion Preparing an assignment	<ul style="list-style-type: none"> • Role performance assessment in group discussion • Examine the assignment
4. To develop the ability to become an effective classroom communicator. 5. To plan an effective communication process during the	<ul style="list-style-type: none"> • Classroom as a communication system: • components of effective classroom communication 	Meaningful verbal expression Group discussion	<ul style="list-style-type: none"> • Role performance analysis

classroom teaching			
6. Acquaint with the FIACS 7. Develops skill in matrix construction. 8. To develop the ability to interpret the matrix and to explain the nature of the classroom interaction	<ul style="list-style-type: none"> Classroom Interaction Analysis – FIACS metric construction and interpretation 	<p>Hands on experience</p> <p>Individual practice</p>	<ul style="list-style-type: none"> Assessing the skill development Mid Sem Exam

UNIT III: ICT IN EDUCATION (THEORY 20 HOURS & PRACTICAL 25 HOURS)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
A. Introduction to ICT in education			
1. To familiarize with the role of ICT in education	<ul style="list-style-type: none"> Concept and importance of ICT in education 	<p>Verbal expression</p> <p>General discussion</p> <p>Assignment</p>	<ul style="list-style-type: none"> Evaluation based on documentation
2. To explore applications of ICT in various field of education	<ul style="list-style-type: none"> Scope of ICT in Education Teaching- Learning process Publication Evaluation Research 	<p>Group discussion</p>	<ul style="list-style-type: none"> Role performance analysis
3. To familiarize with advancements in world wide web	<ul style="list-style-type: none"> Trends and advancements in www: Web 1.0 Web 2.0. Web 3.0 	<p>Collaborative interaction</p>	<ul style="list-style-type: none"> Level of participation in group activity
4. To understand the role to teacher in a digital era	<ul style="list-style-type: none"> Teacher in a digital era: Changing roles and competencies 	<p>Meaningful verbal expression</p> <p>Active learning activities</p> <p>Brain storming</p>	<ul style="list-style-type: none"> Assimilating the materials Monitoring participation and performance

B. Enriching classroom practices through web technologies			
1. Acquaint with various concepts in ICT and its applications in the classroom teaching learning process	<ul style="list-style-type: none"> • Concept, meaning and merits of : • Computer Assisted Instruction (CAI) • Computer Managed Instruction (CMI) • Computer Mediated Communication (CMC) in Education • Computer simulation • Blended learning • Educational podcast • m-learning • Web- based learning • Cloud computing. 	<p>Meaningful verbal expression</p> <p>Practical sessions</p> <p>Demonstrations</p> <p>Techno lab activities</p> <p>Online resources</p> <p>Multimedia modes</p>	<ul style="list-style-type: none"> • Participation in class activity • Observation • Observation • On task behaviour
2. To familiarize with the web resources	<ul style="list-style-type: none"> • Web services: • e-mail • chat • online forums • blog • wiki • e-library 	<p>Demonstration</p> <p>Online resources</p> <p>Hands on experience</p> <p>Techno lab activities</p>	<ul style="list-style-type: none"> • Participation in activities • Skill development • On task behaviour
3. To develop the ability to use the web resources	<ul style="list-style-type: none"> • Academic web resources : • e-journals • online dictionary 	<p>Online resources</p> <p>Demonstration</p>	
4. To familiarize with various free software's applicable in classroom	<ul style="list-style-type: none"> • Familiarizing free educational software: • Tellurium • Kalzium • Tupic 2 D Magic • G-Compris • Geogebra. 	<p>Demonstration</p> <p>Techno lab activities</p> <p>Hands on experience</p> <p>Peer group instruction</p>	<ul style="list-style-type: none"> • Performance assessment in techno lab activities • On task behaviour
5. To develop skill in using software's for enriching classroom activity			
6. To explore creative avenues of ICT in education	<ul style="list-style-type: none"> • e-learning –concept, types –synchronous and asynchronous- merits and demerits: • Learning Management Systems. 	<p>Meaningful verbal expression</p> <p>Discussion</p>	<ul style="list-style-type: none"> • Participation in the classroom activity

	<ul style="list-style-type: none"> • Learning Object Repository(LOR) 	Reflective sessions Online resources	<ul style="list-style-type: none"> • Role performance analysis
7. To familiarize with content development process and platforms available	<ul style="list-style-type: none"> • e-content features- concept and scope. • e-content development initiatives in India : NME-ICT, UGC-CEC 	Narrative sessions Reflective practices Online resources	<ul style="list-style-type: none"> • Participation in class activity • On task behaviour
8. To get acquainted with the concept of virtual learning environment	<ul style="list-style-type: none"> • Virtual tools : • Virtual learning Environment • Virtual Labs • Web applications for development of tests : • Hot potatoes • Online quiz maker 	Demonstration Discussion Techno lab activity	<ul style="list-style-type: none"> • Participation in activity
9. To familiarize with the tools available for creation of tests			

Unit IV. Students Safety on the net (Theory 10hours & Practical 3 hours)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To familiarize with computer safety on the net	<ul style="list-style-type: none"> • Computer virus- (malwares, spywares, trojan)- preventive measures- (Firewall, antivirus software) 	Introductory lecture Techno lab activities Peer tutoring	<ul style="list-style-type: none"> • Performance in techno lab activities
2. To create an awareness about personal safety on the net	<ul style="list-style-type: none"> • Cyber privacy and password protection 	Demonstration Hands on experience Techno lab activities Peer tutoring	<ul style="list-style-type: none"> • Participant observation • Skill assessment • Performance assessment
3. To familiarize with the legal and ethical issues	<ul style="list-style-type: none"> • Legal and ethical issues- Copyright, Plagiarism, Hacking, Netiquette, Phishing, Software privacy 	e- resource demonstration	<ul style="list-style-type: none"> • Participant observation • Performance in classroom discussion
4. To develop a sense of intellectual property right		Group discussion	

5. To know about cyber laws	<ul style="list-style-type: none"> • Cyber law- IT Act 2000, IT Act 2008. 	Class discussion Printed media such as newspapers and magazines Home assignment	<ul style="list-style-type: none"> • Participation in class discussion • Locating resources related to content • Evaluating the assignment
6. To practice wise use of web resources	<ul style="list-style-type: none"> • Role of teacher in conscientizing about • Child abuse over the net • Misuse of internet (morphing, pornography) • Health hazards of using computer 	Internet based activities Techno lab activities Peer tutoring Individual assignment	<ul style="list-style-type: none"> • Skill development assessment • Participation in lab activities • Evaluating assignments

Suggested Readings

- Parker, JessicaK.(2012). Teaching Tech-Savvy Kids- Bringing Digital Media into the Classroom, Grade 5-12. New Delhi: SAGE Publications.Pvt.Ltd.
- Kist, William(2012). The Socially Networked Classroom- Teaching in the New Media Age. New Delhi: SAGE Publications Pvt Ltd.
- Jimoyiannis, Athanassios(2012). Research on E-learning & ICT in Education. New York: Springer.
- Aimee M.Bissonett, J.D.(2009). Cyber Law- Maximising Safety and Minimising risk in classrooms.New Delhi: SAGE Publications India Pvt. Ltd.
- Cennamo, Katherine(2012). Technology Integration for Meaningful Classroom Use: A Standards- Based Approach. New York: Cengage Publishers
- Aggarwal, D.D.(2009). Educational Technology. New Delhi: Sarup& Sons India Pvt. Ltd.
- Santhanam, S.,Paneerselvam, A., &Sampath K. (2001). Introduction to Educational Technology. New Delhi: Sterling Publishers,Pvt. Ltd.
- Nicols, Adelaide Doyle., Cox, J.SabrinaMims.,Johnson, RuthIs., (2012). Developing Portfolios in Education- A guide to Reflection, Inquiry & Assessment -2nd edition. New Delhi: SAGE Publications Pvt. Ltd.
- Wright, Robert J. (2008). Educational Assessment, Tests & Measurements in the Age of Accountability. New Delhi: SAGE Publications Pvt.Ltd.
- Jefferied, Julie & Diamond, Ian (2013). Beginning Statistics- An Introduction for Social Scientists. New Delhi: Sage Publications Pvt. Ltd.
- Smith, Claire Wyatt &Klenowski, Valentina (2013). Assessment for Education- Standards, Judgement & Moderation. New Delhi: SAGE Publications Pvt Ltd.
- Nath, Ruchika & Singh, Y.K.(2008). Teaching of Computers. APH Publishing corporation, New Delhi
- Chaudhary, Jagdeesh & Pathak, R.P. (2012) Educational Technology. Pearson. Dorling Kindersley(India) Pvt.Ltd., New Delhi
- Venkataih., N.(2012). Educational Technology,. Atul Pubshers, New Delhi
- Sharma, R.A. (2005). Technological Foundations of Education. R.Lal Book Depot, Meerut.

Web Resources

- www.avaudiovisualaids.blogspot.com/2010/10/av-aids-in-teaching.html
- www.slideshare.net/pria87/audio-visual-aids
- www.tecweb.org/eddevel/edtech/teleconf.html
- www.slideshare.net/diputr/fiacs-flanders-interaction
- <https://moodle.org/>
- www.ehow.com/list_7640133_legal-ethical-issues-technology.html
- www.rogerdarlington.co.uk/Internetethics.html
- www.thefreedictionary.com/computer+simulation
- www.jite.org/documents/Vol2/v2p001-013-59.pdf
- www.e-learningconsulting.com/consulting/what/e-learning.html
- www.cemca.org/e-learning_guidebook.pdf

EDU- 04.1 : THEORETICAL BASE OFMALAYALAM EDUCATION.

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

Objectives:

- To get familiarized with the functional plane of teaching and learning and the divergent roles expected to be played as a teacher
- To understand the importance, nature and functions of Mother tongue
- To get accustomed with the evolution of Malayalam language
- To understand the relation between Malayalam and other language.
- To find out the relation between language and culture.
- To get familiarized with the aims and objectives of teaching Malayalam, Taxonomy of educational objectives etc.
- To understand the Methods, approaches, strategies, modern educational theories and concepts of teaching Malayalam language and literature

Contents :

Unit – 1 : Introduction to teaching and Learning -

Unit – 2 : Nature and Development of Malayalam –

Unit – 3 : Aims and Objectives of Teaching Malayalam -

Unit – 4 : Methods and Strategies in Malayalam Teaching; Traditional and Modern –

Unit – 5 : New Educational Theories and Concepts –

UNIT 1: INTRODUCTION TO TEACHING AND LEARNING

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To get familiarized with the functional plane of teaching and learning and the divergent roles expected to be played as a teacher	<ul style="list-style-type: none">• Inter dependence of teaching and learning- class room, teacher, learner, teaching learning process,• Learning Environment, Learning activities, Learning Styles, Learning aids	Group discussion	

	<ul style="list-style-type: none"> • Group activities, Grouping techniques • Definition of learning from different point of view • Maxims of teaching • Teacher competencies and roles - mentor, facilitator, reflective practitioner, scaffolder, Social Engineer • Language Teacher • Principles of teaching language 	<p>Assignment</p> <p>Seminar</p> <p>film show of Educational films</p> <p>Appreciation sessions based on educational books like Toto Chan, Divaswapna, Teacher, Parivarthanonmugha Vidhyaabyasam, Vidyabyaasathil Viplavam etc.</p>	<p>Assignment Paper presentation</p> <p>Participatory Discussions</p>
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UNIT 2: NATURE AND DEVELOPMENT OF MALAYALAM

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
<ol style="list-style-type: none"> 1. To understand the importance, nature and functions of Mother tongue 2. To get familiarized with the evolution of Malayalam language 3. To understand the relation between Malayalam and other language. 4. To find out the relation between language and culture. 	<ul style="list-style-type: none"> • Functions of Language • Impact of language on social, intellectual, cultural, educational development • Importance of Mother tongue - Mahatma Gandhi's vision on the importance of Mother tongue, • Mother tongue and medium of instruction • Malayalam as an official language • Mother tongue as a tool for preservation, transmission and transformation of culture 	<p>Assignments</p> <p>Debates</p> <p>Seminar/Symposium</p>	<ul style="list-style-type: none"> • Assignment Paper, • Seminar presentation • Test • Participation in Debate & Symposium

UNIT 3 AIMS AND OBJECTIVES OF TEACHING MALAYALAM

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To get familiarized with the aims and objectives of teaching Malayalam, Taxonomy of educational objectives etc.	<ul style="list-style-type: none"> • Aims and Objectives of teaching Malayalam at different levels of schooling with special emphasis to secondary and Higher secondary levels • Curricular objectives of Secondary and Higher Secondary classes • Taxonomy of Educational objectives – Benjamin Bloom 	<p>Debate on recent changes practiced in the state schools</p> <p>Discussion on the relevance of Blooms Taxonomy</p>	<ul style="list-style-type: none"> • The extent of participation in debate/discussion etc.

UNIT 4 METHODS AND STRATEGIES IN MALAYALAM TEACHING ; TRADITIONAL AND MODERN

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To understand the Methods, approaches, strategies, modern educational theories and concepts of teaching Malayalam language and literature	<ul style="list-style-type: none"> • Lecture method • Project method • Play way method • Dramatisation • Dalton Plan • Inductive and deductive methods • Role play and simulation • Problem solving method • New Educational Theories and Concepts • Cognitive Constructivism – Piaget and Bruner • Social Constructivism – Vygotsky 	<p>Project</p> <p>Short essay</p> <p>Open discussion</p> <p>Comparative note</p> <p>Action research</p> <p>Seminar on the significance of new educational theories</p> <p>Assignment</p> <p>Preparation of</p>	<ul style="list-style-type: none"> • Project paper • Essay • Participation in discussion • Action research findings • Seminar paper and performance • Assignment paper • Prepared notes

	<ul style="list-style-type: none"> • Multiple Intelligence Theory • Emotional Intelligence Theory • Critical Pedagogy - Paulo Freire • Meta Cognition • Integration of new theories and concepts in teaching Malayalam 	Comparative notes on new theories with the help of reference books	
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EDU – 05. 1 : PEDAGOGIC CONTENT KNOWLEDGE ANALYSIS : MALAYALAM.

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

Objectives :

- To get familiarized with the theory and practice of different language discourses
- To get familiarized with the theory and practice of different language discourses
- To get acquainted with the integration of new theories and concepts
- To get acquainted with the integration of new theories and concepts
- To understand, practice and master basic language skills communication skills etc.
- To understand the importance of resource materials for teaching and learning like text book, work book, hand book, dictionary etc.

Contents :

- Unit – 1 : Introduction to Pedagogic Content Knowledge analysis -**
Unit – 2 : Discourse Oriented Pedagogy
Unit – 3 : Essential Requirements of Teaching Malayalam,
Unit – 4 : Acquisition Language Skills and Micro teaching
Unit – 5 : Resources in Teaching and Learning of Malayalam

Unit 1: Introduction to Pedagogic Content Knowledge analysis

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To understand the meaning and practice pedagogic content knowledge analysis 2. To get familiarized with the theory and practice of different language discourses	<ul style="list-style-type: none"> • Meaning, features, and principles of pedagogic content knowledge analysis • Pedagogic content knowledge analysis of Secondary and Higher Secondary level text books • Discourse Oriented Pedagogy • Importance of discourse in language learning and teaching • The salient features of Discourse Oriented Pedagogy • Functions of: Debate, Drama Seminars, Discussions, Conversations, Diary, Posters, Narratives, Screen Play, Editorials, and Travelogues etc. • Process of constructing discourses 	<p>Preparation of a comparative description on pedagogic content knowledge analysis of secondary/higher secondary level text books</p> <p>Preparation of discourse oriented activities for high school classes</p> <p>Discussion on the suitability and adaptability of discourse oriented pedagogy</p> <p>Preparation of discourse like narratives/ travelogues/ editorials/ posters etc.</p>	<ul style="list-style-type: none"> • Student's works • Prepared activities • Active Participation in discussion • Written documents

UNIT 2: PLANNING AND DESIGNING OF LESSON TEMPLATES

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To understand the need and significance of instructional planning 2. To get acquainted with the integration of new theories and concepts	<ul style="list-style-type: none"> • Need and significance • Year Plan, Unit Plan, Lesson Plan • Incorporation of new theories (MI theory, Constructivism, Critical pedagogy, Emotional Intelligence etc.) in the preparation of Year Plan/Unit Plan/ Lesson Plan • Absorption of the concept ‘Entrepreneurship’ in instructional planning • Teaching of Prose, Poetry, Grammar and Composition – scope, goals, selection, methods, approaches, different forms/types 	Preparation of year plan/unit plan etc. Workshop on developing entrepreneurship in HS/HSS students through teaching Malayalam	<ul style="list-style-type: none"> • Innovations in planning year plan/unit plan etc. • Originality of ideas/practices • In the workshop • Practical sessions in the classrooms • Appreciation sessions

UNIT 3: ESSENTIAL REQUIREMENTS OF TEACHING MALAYALAM

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To understand, practice and master basic language skills, 2. Communication skills etc.	<ul style="list-style-type: none"> • Acquisition Language Skills and Micro teaching • Scope and application of basic language skills (Listening, Speaking, Reading and writing.) in different levels of schooling with special emphasis to Secondary and Higher Secondary levels 	Preparation of a test for HS/HSS students to find out the common errors in reading and writing Malayalam	<ul style="list-style-type: none"> • Appropriateness of Practicum • Effectiveness of the test • Participation of students • Suitability of prepared lessons

	<ul style="list-style-type: none"> • Common errors in reading, writing and pronouncing Malayalam. • Errors in sentence construction • The notion of 'EDITING' instead of 'CORRECTION' • Communication Skills • Micro Teaching • Development of teaching skills through micro teaching • Definition and Mechanics • Micro Teaching cycle • Core Skills • Introduction- Illustrating with examples • Explaining- Questioning • Stimulus Variation- Reinforcement • Using Blackboard- Using teaching aids • Reading -Recitation 	<p>Familiarization of books on good Malayalam usage like Thettillattha Malayalam etc.</p> <p>Practice sessions on development of communication skills</p> <p>Preparation of lessons based on core skills</p> <p>Familiarization of assessment criteria</p> <p>Practice sessions of major teaching skills</p>	<ul style="list-style-type: none"> • Performance assessment by peers • Appropriateness of presentations
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Unit 4 Resources in Teaching and Learning of Malayalam

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To understand the importance of resource materials for teaching and learning like text book, work book, hand book, dictionary etc.	<ul style="list-style-type: none"> • Text Book: • Characteristics of a good text book. • Resource Units and Workbooks • Teacher's Handbook. • Periodicals, handouts, books etc. • Dictionaries, Thesaurus, Encyclopedias 	<p>Text book review</p> <p>Test paper</p> <p>Organization of a reading corner in</p>	<ul style="list-style-type: none"> • Comprehensiveness • Student Participation • Versatility

		class room	
		Preparation of audio lessons	

References: for all Semesters.

Prof. MK Prasad

Bhashapadanavum Bhodhana shaastravum

Bhashapadanavum Sidhaanthangalum

Divaswapna

EnganeMalayalattilBlogam

Gadyarachana

Gadyashilpam

Kerala Panineeyam

KuttikalePadanathilSahayikkam

MalayalaBhashaBodhanam

MalayalaBhashadyapanam

MalayalaKavithapadhanamgal

MalayalaSahithyaCharithram

MalayalaSahithyaCharithram

MalayalaSahithyaNiroopanam

MalayalaSahithyaVimarshanam

Mathrubhashabhodhanam:

Micro teaching

MumbilullaJeevitham

Nalla Malayalam

NammudeBhasha

Padyapadhathi sidhaantham

Kerala Shaasthrasaahitya Parishad

Dr.SreeVrinda Nair N

Dr.SreeVrinda Nair N

GijubhaiBhadeka

Baburaj PM

Dr.CK Chandrasekharan Nair

CV VasudevaBhattathiri

AR RajarajaVarma

PK Abdul Hammed Karassery

CV VasudevaBhattathiri

Dr.KSivarajan

K Sachidanandan

Dr. KalpattaBlakrishnan

PK Parameswaran Nair

Dr. PanmanaRamachandran Nair

Dr. SukumarAzheekkode

Allen,D& Ryan, K

J Krishnamoorthi

CV VasudevaBhattathiri

EMS Namboothiripad

Dr. Ravisankhar S. Nair

DC Books Kottayam

DC Books Kottayam

National Book Trust

DC Books, Kottayam

Kerala Bhasha Institute

Kerala Bhasha Institute

DC Books, Kottayam

DC Books, Kottayam

Kerala Bhasha Institute

Calicut University

Mathrubhoomi Books

Kerala Bhasha Institute

Sahithya Academy

Current Books, Kottayam

DC Books, Kottayam

Adison Wesley, London

DC Books, Kottayam

DC Books, Kottayam

Kerala Bhasha Institute

Kerala Bhasha Institute

ParivarthanonmughaVidhyabhyasam
PravanathakalumReethikalum.
PrayogikaVyakaranam
PurogamanaVidyabhyaasachinthakal
Thetillatta Malayalam
TirakkadhaRachana – KalayumSidhanthvum
Toto Chan
ShaasthrasaahityaParishad
Tuition to Intuition
Ucharanamnannavan
VidhyabhyasathilViplavam
Vidyabhyaasachinthakal
VidyabhyasaParivarthanattinoruAmugham
VyakaranaMitham

Guru NithyachaithanyaYathi
Bindhu,C.M
Irinjayam Ravi
PV Purushothaman
Prof. PanmanaRamachandran Nair
Jose K Manuel
TetsukoKoriyoNagi

Dr. KN Anandan
Dr.VRPrabodhachandran
Osho
AsisTharuvana
SheshgiriPrabhu

NarayanaGurukulam, Varkala
Scorpio, Calicut

Kerala ShaasthrasaahityaParishad
DC Books, Kottayam
Current Books, Kottayam
National Book Trust, Kerala

Transcend, Malappuram
Kerala Bhasha Institute
Silence, Kozhikkode
Olive, Kozhikkode
Kerala ShaasthrasaahityaParishad

Online Resources

<http://ml.wikipedia.org>
<https://www.facebook.com/groups/144983732246185>
<https://www.facebook.com/groups/paribhasha>
<http://www.keralasahityaakademi.org/>
<http://malayalambloghelp.blogspot.com/>
<http://www.topsite.com/best/malayalam>
<http://malayalam.kerala.gov.in/index.php>
http://malayalaaikyavedi.blogspot.in/2015/04/blog-post_61.html
<http://www.facebook.com/pages/മലയാളപഠനബോധന-സഹായി/628705850559130?ref=hl>
<http://bloghelpline.cyberjalakam.com/>
<http://blogsahayi.blogspot.in/>

EDU –04.2 : THEORETICAL BASE OF ENGLISH EDUCATION.

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

Objectives :

The student teacher :

- Familiarizes with the nature and purpose of language teaching.
- Grasps problems related to learning a Second Language.
- Draws implications of different theories of learning for Second Language instruction.
- Gets an awareness of Approaches, Methods and Instructional Strategies for teaching English.

Contents

Unit 1: General Introduction to English Language Teaching and Learning

Unit 2: Nature and Development of English Language

Unit 3: Aims and Objectives of Teaching English

Unit 4: Methods and Strategies of Teaching English

Unit 1: General Introduction to English Language Teaching and Learning (Duration: 25 hrs)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. Student teacher familiarizes with functional plane of teaching and learning and the divergent roles expected to be played as Language Teacher 2. Grasps the current status of English in India and its	<ul style="list-style-type: none"> • Perspectives of English Studies -Significance in the Global context -World Englishes -English as a skill subject • Teaching ESL, EFL, First Language [L₁] and Second Language [L₂] -Bilingualism -Code switching • Teaching of English in India 	Intro lectures on ELT in India Makes student recall qualities of teachers whom they admire/remember Narration, anecdotes	<ul style="list-style-type: none"> • Contribution in debate on need of English as an International Language • Performance in classroom discussions regarding teacher role • Entry recorded in Reflective

importance	<ul style="list-style-type: none"> -Three Language Formulae – Mother tongue Interference -English as a Link Language • Language teacher competencies-Roles and Responsibilities of English Teacher-mentor, facilitator, scaffolder, reflective practitioner 	<p>of lives of teachers who served as role models</p> <p>Views films related to teachers/ teaching</p> <p>Reads stories about lives of great teachers</p> <p>Web-based resources</p>	journal
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Unit 2:Nature and Development of English Language (20 hrs)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. Gathers knowledge about meaning, nature and characteristics of language and select theories of language teaching and learning	<ul style="list-style-type: none"> • Language and culture, Language and society, Language and media(print and digital) • Basic concepts in Linguistics- Morphology, Phonology, Syntax, Semantics • Psycho-linguistic Theories • Behaviourism- imitation, repetition, reinforcement • Cognitivism -Schema • Constructivism-ZPD-Scaffolding, Mental Processes • Chomsky-LAD-Universal Grammar • Krashen’s Hypotheses • Multiple Intelligence • Neurolinguistic Programming 	<p>Brain storming</p> <p>Seminar</p> <p>Presentations</p> <p>Quiz</p> <p>Peer Tutorial</p> <p>Discussion</p> <p>Invited Talks</p>	<ul style="list-style-type: none"> • Examine level of participation • Role performance analysis • Evaluation based on documentation

Unit 3:Aims and Objectives of Teaching English (20 hrs)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. Develops an understanding of the principles of language teaching	<ul style="list-style-type: none"> • Utilitarian aim, Socio-cultural aims • Objectives of Teaching English • Principles of Language Learning • Ideology of teaching English in Indian classrooms; Addressing learner sensibilities and learner abilities in language learning; Developing communicative competence 	Brain storming Quiz Discussion Assigned readings from the works of theorists Group discussion	<ul style="list-style-type: none"> • Examine level of participation • Evaluation based on documentation • Examine student report • Address the level of pupil involvement in Group Discussion

Unit 4:Methods and Strategies of Teaching English (25 hrs)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. Familiarizes with traditional approaches and methods of language teaching 2. Updates Knowledge of current approaches and methods 3. Develops the ability to choose the most suitable method for a given content or group of learners	<ul style="list-style-type: none"> • Approach, Method, Technique • Grammar Trans. Meth, Bilingual Meth, Direct Meth. • Audio-lingual Meth, SOS Approach, Communicative Approach • Humanistic approaches—TPR, Silent Way, CLL, Suggestopaedia • Task Based Language Teaching 	Demonstration of steps followed in different methods Watching video recordings - Accessing Online input on the topic Co-relating class room activities	<ul style="list-style-type: none"> • Evaluate the competence to compare and contrast • Monitor the ability to distinguish between similar concepts, phases

References

- Clarke, Stephen (etal) (2010) Becoming an English Teacher. Sage, Los Angeles.
- Cox, Carole. (2002) Teaching Language Arts. Allyn & Bacon, Boston.
- Davis, Philip Powell and Paul Gunasekhar.(2013) English Language Teacher Education in a Diverse Environment. British Council.
- Doff, Adrian.(2008) Teach English : A Training Course for Teachers Cambridge University Press.
- Graddol, David. (2010). English Next India: The Future of English in India. British Council.
- Hedge, Tricia. (2000). Teaching and Learning in the Language Classroom. Oxford University Press.
- Jack C. Richards, and Theodore S. Rodgers.(1986) Approaches and Methods in Language Teaching. Cambridge University Press.
- Jack C. Richards, and Anne Burns. (2009) The Cambridge Guide to Second Language Teacher Education. Cambridge University Press.
- Norton, Donna E (et al.) (1999). Language Arts Activities for Children. Prentice Hall, New Jersey.
- Reyes, Sharon Adelman. (et al.) Constructivist Strategies for Teaching English Language Learners. Corwin Press.
- Seeley, John (2003) The Oxford Guide to Writing and Speaking. Oxford University Press.
- Wallace, Michael J. (2006) Study Skills in English. Cambridge University Press.
- Current Perspectives in Teaching the Four Skills: by ELI HINKEL Seattle University Seattle, Washington, United States TESOL QUARTERLY P 110-131

Online resources:

- Activities for developing skills <http://www.teachingexpertise.com/articles/activities-for-developing-skills-1106>
- Current trends in Teaching Listening and Speaking by Jack. C. Richards www.oup.com/elt
- Learning Brain-based way <http://languagelab.com.sg/faq.php>
- The Essentials of Language Teaching <http://www.nclrc.org/essentials/index.htm>
- Teaching English to Speakers of Other Languages by M.S. Thirumalai. <http://www.languageinindia.com/april2002/tesolbook.html>
- Task-Based Language Teaching and Learning: An Overview http://www.asian-efl-journal.com/Sept_06_ro.php
- BBC World Service: Learning English <http://www.bbc.co.uk/worldservice/learningenglish/index.shtml>
- Dave Sperling's ESL Café <http://www.eslcafe.com/>
- FRET (Free Resources for English Teaching) <http://www.english-teaching.co.uk/>
- Web English Teacher <http://www.webenglishteacher.com/>

EDU. 05.2 : PEDAGOGIC CONTENT KNOWLEDGE ANALYSIS: ENGLISH
(Theoretical Discourses – 60 hours & CE – 30 hours)

Objectives :

The student teacher:

- Familiarizes with the different dimensions of Pedagogic Content Knowledge.
- Develops an understanding of objectives and specifications for teaching English as a Second Language.
- Familiarizes the procedure and steps for planning different kinds of lesson.
- Analyzes Secondary Course Books and identifies suitable strategies for transacting content.
- Explores ways of designing appropriate learning aids.
- Identifies suitable strategies for assessment.

Contents :

Unit I : Introduction to Pedagogic Content Knowledge (PCK)

Unit II : Planning and Designing of Lesson Templates

Unit III : Essential Requirements for Teaching of English

Unit IV : Resources in Teaching and Learning of English

Unit 1: Introduction to Pedagogic Content Knowledge(PCK) (25 hrs)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. Develops an understanding of pedagogy and its principles 2. Familiarizes with Taxonomy of Educational Objectives 3. Develops an understanding of	<ul style="list-style-type: none"> • Pedagogic Analysis Scope, Principles and Objectives • Pedagogic Content Knowledge Scope in teaching and learning • Objective-based Instruction 	Direct instruction Engaging in Group discussion Individual and	<ul style="list-style-type: none"> • Participation in task. • Peer assessment of presentations

types of thinking 4. Familiarizes with the nature of a Course Book	<p>Bloom's Taxonomy: Specifications,</p> <ul style="list-style-type: none"> • Process skills & Thinking Skills (Critical and Creative), Problem Solving • Content Analysis of State, CBSE and ICSE Syllabus - Themes, Language elements, Sequencing of content, Deficiency in content • Discourses- slogans, placards, notices, reports, diary entry, messages -script of a speech, letter, posters, advertisement, write up, conversation, profile etc. 	<p>collaborative tasks</p> <p>Critique of different Course Books</p>	
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Unit 2: Planning and design of lesson templates (25 hrs)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. Familiarizes the procedure and steps for planning different kinds of lesson. 2. Analyzes Secondary Course Books and identifies suitable strategies for transacting content.	<ul style="list-style-type: none"> • Planning- Relevance, mode and Design-Year Plan-Unit Plan - Lesson Templates • Components and Strategies for teaching: • Prose- Intensive and Extensive reading; Skimming and Scanning, Silent and Oral reading, Pre-reading and Post-reading • Poetry- Appreciation, Deviant language of Poetry • Grammar- Formal and Functional, Inductive and Deductive methods, Use of Substitution Tables • Vocabulary - Content and Function words, Active and passive vocabulary, Techniques and Strategies for enriching vocabulary 	<p>Workshop mode to identify Objectives, Specifications and appropriate testing mechanisms</p> <p>Critiquing Syllabus Grids in Course Books</p> <p>Intro. lectures on thinking skills</p> <p>Demo. by expert</p> <p>Preparation of Group Lesson Plan/Teaching Manual</p>	<ul style="list-style-type: none"> • Ability to develop suitable Lesson • Plan/ Teaching Manual for different content • Phased monitoring • Performance in Workshop • Checking ability to frame appropriate Objectives and Specifications

		Practice under supervised guidance. Task-directed discussion and Applied exercises	
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Unit 3: Essential requirements for teaching of English

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. Familiarizes with different teaching skills	<ul style="list-style-type: none"> • Analysis and Practice of Language Skills- LSRW-Identification and Practice of Language Elementsstructure, vocabulary etc. • Core Skills of Teaching- Introduction <ul style="list-style-type: none"> - Illustrating with examples - Explaining - Questioning - Stimulus Variation - Reinforcement - Using Blackboard - Using teaching aids - Response Management-Classroom Management - Reading -Recitation • ICT skills • Micro Teaching-Concept, Phases and Cycle 	Peer observation using Schedule Videography for reflection Supervised guidance	<ul style="list-style-type: none"> • Use of Observation schedule • Reflection write- up submitted following viewing of video recording of own teaching

Unit 4: Resources in teaching and learning of English (20 hrs)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. Familiarizes with ways of employing different aids for teaching different content 2. Explores ways of designing appropriate learning aids.	<ul style="list-style-type: none"> • Teaching aids- design and development • Learning support resources • Pictures • Charts • Flash Card • Models • News paper and Journals -Documentary • Audio-Video Clips • Interactive Board • LCD Projector • Internet • Language Lab 	Display of specimen aids Guidance for preparation of aids for different content in workshop mode	<ul style="list-style-type: none"> • Peer comment • Guided supervision

References

- Baddock, B. (1996. **Using Films in the English Class**).Hemel Hempstead:Phoenix ELT.
- Baker, Ann. **Introducing English Pronunciation**. CambridgeUniversity Press.
- **Cambridge Skills for Fluency** Series by Cambridge University Press.
- **Cambridge CAE Skills** Series by Cambridge University Press.
- Collie,Joanne and Stephen Slater. **Speaking**. Cambridge University Press.
- Doff, Adrian and Carolyn Becket. **Listening**. Cambridge University Press.
- Krashen,S.D.(1982) **Principles and Practice in Second LanguageAcquisition**. Oxford, Pergamon Press.
- Greenall, Simon and Diana Pye, **Reading**. Cambridge University Press.
- Littlejohn, Andrew. **Writing**. Cambridge University Press.
- Lonergan, J. (1984). **Video in Language Teaching**. CambridgeUniversity Press.
- Mary, Finochiaaro. **English as a Second Language from Theory to Practice** , Regents Pub. Company, New York.
- Murphy, Raymond. **Essential Grammar in Use**. Cambridge University Press.
- Prabu,N.S. (1987)**Second Language Pedagogy**. Oxford University Press.
- Redman, Stuart. **English Vocabulary in Use Pre-Intermediateand Intermediate**. Cambridge University Press.

- Sherman, J. (2003) **Using Authentic Video in the Language Classroom**. Cambridge University Press.
- Shrum, Judith L and Eileen W. Glisan. (2000). **Teacher's Handbook: Contextualized Language Instruction**, H.H Heinle & Heinle, Thomson Learning Australia 2nd Ed.
- Wajnryb, Ruth. **Classroom Observation Tasks**. Cambridge University Press.

Online references

- **Bloom's Taxonomy:** <http://cft.vanderbilt.edu/guides-sub-pages/blooms-taxonomy/>
- **Classroom Management :** <http://www.teachingideas.co.uk/more/management/contents.htm>, http://www.educationworld.com/a_curr/curr155.shtml
- **Language skills:** http://www.apsacsectt.edu.pk/download%20material/training%20deptt/workshop%20material/four_skills_of_language.pdf
- **Learning Support Centres in Higher Education (LSCHE):** http://www.lsche.net/?page_id=608
- **Microteaching:** <https://uwaterloo.ca/centre-for-teaching-excellence/support-graduate-students/fundamentals-university-teaching/microteaching-details>
- **Pedagogical Content Knowledge:** <http://mkoehler.educ.msu.edu/tpack/pedagogical-content-knowledge-pck/>
- **Resource Mapping:** <file:///C:/Users/Reliance/Downloads/ResourceMappingExampleWisconsin.pdf>
- **Structure (function) words versus content words:** <http://homepage.ntlworld.com/vivian.c/Words/ContentStructure.htm>

EDU - 04.3: THEORETICAL BASE OF HINDI EDUCATION

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

Objectives

- To mould the prospective teacher with an outlook of teaching profession
- To equip the prospective teacher to uphold the professional spirit in diverse angles
- To familiarize with the features of Hindi education, its aim, objectives and different instructional methods and techniques suited for teaching Hindi
- To acquire effective instructional practices of Hindi education
- Draws implications of different theories of learning Hindi

CONTENTS

Unit 1 : General Introduction to Hindi Teaching and Learning

Unit 2 : Nature and Development of Hindi Language

Unit 3 : Aims and Objectives of Teaching Hindi

Unit 4 : Methods and Strategies of Teaching Hindi

Unit : 1 General Introduction to Hindi Teaching and Learning (12 Hrs + 6Hrs)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. Student teachers acquaint with the importance and bases of language 2. Grasp the process of teaching-learning and gain an outlook of teaching profession 3. Analyze learning environment for Hindi instruction	<ul style="list-style-type: none">• Importance of language – Definition – Philosophical, Psychological, Sociological bases of language--Language and human, language and society, language and gender, Universal Grammar—Noam Chomsky, Neuro- linguistic programming, Importance of Hindi language, Hindi language and its practice	Meaningful verbal presentation Brain storming Makes student recall qualities of teachers whom they admire Narration, anecdotes of lives of teachers	<ul style="list-style-type: none">• Case analysis presentation• Contribution in debate on qualities of teacher and Hindi as second language• Performance in classroom discussions

<p>4. Adapt the changing structure of the concept of classroom instruction</p>	<ul style="list-style-type: none"> • Teaching and learning-Definition-Teaching profession and service, Principles and Maxims of teaching-- Factors determine effective instruction, Classroom Interactions: Teacher-pupil, Pupil-pupil, Pupil-society,Pupil-learning resources,learning experience,Interdependence of teaching-learning,Teaching-learning process • Continuing Professional Development (CPD): Teacher as professional-- Duties and responsibilities; various roles: knowledge worker, facilitator, scaffolder, mentor, social engineer, counselor, techno pedagogue, reflective practitioner • Problems and difficulties confronted by teachers and learners in Hindi instruction • Learning environment • Class room as a social laboratory, Classroom without walls(CWW),Blending of synchronous and asynchronous mode of learning,Virtual learning environment(VLE) 	<p>who served as role models Views films related to teachers</p>	
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Unit: 2 Nature and Development of Hindi Language (10 Hrs + 7 Hrs)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
<ol style="list-style-type: none"> 1. Familiarize with the unique features of Hindi language 2. Compete with communicating Hindi 3. Familiarize with different reports and commissions 4. Understand the scope, changes and developments of Hindi education 5. Equip to integrate essential inter disciplinary attributes in Hindi education 	<ul style="list-style-type: none"> • Special features and characteristics of Hindi language and its script Devanagiri lipi in standardized form(MANAK LIPI)—Hindi as national,official and link language • Developing communicative competence • Three language formula, Reports and commissions— • Kothari commission, NPE 1986, • NCF 2005, KCF2007, POA 1992 • Hindi in national integration, values attained through Hindi education • Spread of Hindi in Kerala: Pre independence and post independence period, Scope and job opportunities in learning Hindi, Recent changes and developments of Hindi education in Kerala, Support of media in the development of Hindi in the context of Kerala • Hindi education: Meaning, Definitions and Nature • Modernization of Hindi instruction through technological advancement • Interdisciplinary approach in Hindi Education : Correlation of Hindi education with other subjects – Science, Social Science and other languages like Malayalam, English and Sanskrit 	<p>Discussion</p> <p>Meaningful verbal learning</p> <p>Participatory Approach</p> <p>Open forum discussion</p> <p>Co- operative learning</p> <p>Use of web and Library resources</p>	<ul style="list-style-type: none"> • Address the level of involvement in group discussions • Assessment of MANAKLIPI • Assessment of assignments,projects, seminars • Prepare a brief sketch of NCF and KCF with special reference to language education

UNIT : 3 Aims and objectives of Teaching Hindi (18 Hrs + 7 Hrs)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. Generate knowledge about the aims and objectives of teaching Hindi 2. Endow with the significance of taxonomy of instructional objectives in Hindi education 3. Familiarize with varied psychological and learning theories	<ul style="list-style-type: none"> • Aims of Teaching Hindi: linguistic, literary ,utilitarian and socio-cultural • General objectives of teaching Hindi, Objectives of teaching Hindi at different levels(primary,secondary and higher secondary) • Objectives of NCERT, NCTE • Framing curricular objectives in teaching Hindi • Role of Information and Communication Technology (ICT) in Hindi learning • Bloom’s taxonomy of Instructional objectives - Revised form: – (Anderson & Krathwohl) with special reference to ‘Create’ objective -Technology integrated taxonomy – Collins et al.- Higher Order Skills---Analysis, Synthesis, Evaluation and its applications • Concepts of Bruner, Piaget, Howard Gardner, and Vygotsky--- Theories, Implications of Constructivism,Social Constructivism,Problem Based Instruction, Mental Process, Multiple Intelligence, Emotional Intelligence, HolisticApproach,Motivation in learning,Brain Based Learning, Critical pedagogy , Issue Based Instruction 	General discussion Demonstration Analytical study Group investigation Focus group discussion	<ul style="list-style-type: none"> • Assessing the level of involvement in class activities • Comparative analysis - Bloom’s taxonomy of Instructional objectives traditional with revised one • Monitor the ability to compare & study critically on various theories, methods and approaches

UNIT 4: Methods and Strategies of Teaching Hindi (20Hrs + 10Hrs)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
<ol style="list-style-type: none"> 1. Compete with different instructional methods suited for teaching Hindi 2. Become proficient in selecting most appropriate teaching methods, techniques and strategies in varied context and content 3. Familiarize with various forms of discourses for language learning 	<ul style="list-style-type: none"> • Phases of teaching ,Teaching tactics, Techniques of teaching – Drill, Brain storming, Role play, Review, Dramatization, Buzz session, simulation, Quiz session • Different methods and approaches – Direct method, Indirect method (grammar - translation), Structural method, Inductive-deductive method, Play way method, Activity method, Project method, Heuristic method, Montessori method, Kindergarten method, Basic Education, Dalton plan, Integrated Approach, Interactive approach, Lecture Method, Socialized methods : Group discussion, seminar, debate, symposia, workshop, Problem solving method, Case study, Analytical and Synthetic method, Humanistic Approaches, Task based language teaching, Language games, computer-assisted instruction, programmed instruction, instructional module, simulated teaching, audio-video lessons, use of audio-visual aids, Edusat, video conferencing, online resources-- Importance of Language lab in Hindi Instruction • Instructional strategies – Co-operative and 	<p>Dramatization</p> <p>Debate</p> <p>Role Play</p> <p>Buzz session</p> <p>Quiz session</p> <p>Problem solving method</p> <p>Project method</p> <p>Comparative & critical study on various methods and approaches</p> <p>Learning through various discourses</p>	<ul style="list-style-type: none"> • Report presentation & verification • Monitor the ability to distinguish between similar concepts, phases

	<p>Collaborative learning strategies</p> <ul style="list-style-type: none"> • A critical study of these methods for teaching Hindi • Discourse oriented learning: Aims and different methods of teaching various discourses: Prose,Poetry,grammar,letters,poster,write-ups,reports,etc, • Communicative Approach: Creative Writing 		
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References – for all Semesters.

- Acharya Chatursen,Hindi Sahitya Ka Parichay
- Acharya Nandu Dulare BajPeyi,HindiSahitya Ka Samshiptha Ithihas
- Acharya Sitharan Chaturvedi,Bhasha Ki Shiksha
- Dr.G.C.Bhattacharya,Adhyapak Shiksha,Vinod Pustak Mandir,Agra
- Dr.Bholanath Tiwari,Hindi Bhasha Shikshan
- Dr.Bholanath Tiwari,Hindi Bhasha Ka Saral Vyakaran
- Dr.Satyanarayan Dube,Shikshan Vidhiyam Aadharbhhoth Thatv
- Dr.ShailendraBhooshan,Shikshan Adhigam Ke
- Bhai Yogendrajith, Hindi Bhasha Shikshan, Agrawal Publications,Agra
- Dhirendra Varma,Hindi Bhasha Aur Lipi
- Dinesh Chandra Bharadwaj,Basic Shiksha Manovigyan, Agrawal Publications,Agra
- Durgesh Nandini,Hindi Shikshan,Sumith Enterprises
- Prof.Ganesh Prases Sidha,Bhasha Shikshan Nidhi
- Kamatha Prasad Guru, Hindi Vyakaran
- Kesav Prasad,Hindi Shikshan
- Lalji Ram Shukl,Shiksha Manovigyan
- Dr.K.P.Pandey,Shiksha mem Kriyatmak Anusandhan

- Dr.S.S.Mathur,Shikshan Kala Eevam Naveen Padhathiyam, Agrawal Publications,Agra
- Dr.S.N.Mukherji,Rashtra Bhasha Ki Shiksha
- Dr.Naresh sharma,Shikshan Ki Avasthayem.Vigyan Bharathi,Gaziabad
- Dr.Ramshakl Pandey, Hindi Bhasha Shikshan
- Dr.Ramvilas Sharma,Rashtra Bhasha Ki Samasya
- Dr.Sreedharananda Mukherji,Rashtra Bhasha Ki Shiksha
- Dr.Sitaram Jaiswal,MahendraPal Sharma,Shiksha Ke Thatwik Sidhanth
- P.D.Patak,Shiksha Manovigyan, Agrawal Publications,Agra
- P.G.Kamath,Any Bhasha Shikshan Eak Bhasha Vaigyanik Drishti
- Raveendranath Sreevastav,Bhasha Shikshan,Vani Prakashan,New Delhi
- K.M.Siva Ram Sharma,Hindi Shikshan Kala
- Sadde,Rashtra Bhasha Ka Adhyapan
- B.L.Vats, Hindi Shikshan, Agrawal Publications,Agra
- Yogendra Nath,Bhasha Kaise Padayem
- Devanagari Lipi Tadha Hindi Varthani,Kendriya Hindi Nideshalay,Hindi
- Rashtra Bhasha Bharathi (Patrika),Griha Mantralay,Bharat Sarkar
- Marsha Weil, Joyce Bruce.Models of Teaching.New Delhi:Prentice Hall of India.Ltd.
- Hand Books in Hindi, Kerala State Syllabus,SCERT
- Text Books in Hindi,Kerala State Syllabus,SCERT
- National Curriculum Framework,NCERT (2005),NewDelhi
- Kerala Curriculum Framework,SCERT, Thiruvananthapuram
- Report of Education Commission (Kothari Commission).Govt.of India
- Report of the Official Language Commission

Online Resources :

- <http://ask.metafilter.com/149992/What-are-the-best-resources-for-learning-Hindi>
- <http://www.ala.org/aasl/standards-guidelines/best-websites/2014s>
- <http://www.teachingexpertise.com/articles/activities-for-developing-skills-1106>
- <http://www.topedusites.com/>
- <http://esl.fis.edu/teachers/support/teach.htm>
- Koehler, M. J., & Mishra, P. (2009),Contemporary Issues in Technology and Teacher Education.9(1), 60-70

- <http://www.citejournal.org/articles/v9i1general1.pdf>
- Guidelines for e-content development. (2007-2012) UGC, New Delhi
- <http://www.transparent.com/learn-hindi/>
- <http://learnelearning.com>
- www.thinkvidya.com
- <http://www.uni.edu/becker/hindi.html>
- www.wikipedia.com
- www.google.com

EDU – 05.3 : PEDAGOGIC CONTENT KNOWLEDGE ANALYSIS – HINDI.

(Theoretical discourses-60 & CE – 30 hours)

Objectives

- To understand the key aspects involved in systematic PCK analysis
- Equip to plan the instruction effectively and to design suitable lesson templates, teaching-learning materials and instructional resources
- Attain the ability to develop and practice different teaching skills
- Achieve the ability to develop a pedagogic view point

Contents

Unit : 1 Nature and Scope of Pedagogical content knowledge analysis

Unit: 2 Instructional Planning and Designing Lesson Templates

Unit: 3 Essential Requirements of Teaching Hindi Education

Unit : 4 Instructional Resources in Teaching and Learning of Hindi

Unit : 1 Nature and Scope of Pedagogical Content Knowledge Analysis (15 Hrs +9 Hrs)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. Understand the key aspects involved in systematic PCK analysis 2. Become capable of establishing relationship between pedagogic and content knowledge analysis 3. Develop skill in PCK analysis of text books and hand books	<ul style="list-style-type: none">• Pedagogical content knowledge analysis (PCK)--- Meaning, Scope, Features of PCK analysis, significance of PCK analysis in Hindi discipline---Inter-relationship of Content Knowledge, Pedagogic Knowledge• Scope and Challenges of PCKA in• Knowledge generalization and transaction of Hindi• PCK analysis of text books and hand books in Hindi of Std VII to std XII	Text book analysis Individual and Collaborative tasks Direct instruction Critique of different Course Books	<ul style="list-style-type: none">• Pedagogic Content Knowledge analysis presentation• Text book analysis as individual/group work

Unit: 2 Instructional Planning and Designing Lesson Templates (16 Hrs + 6 Hrs)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
<ul style="list-style-type: none"> Develop skills in systematic instructional planning and designing lesson templates 	<ul style="list-style-type: none"> Planning and designing different lessons, Instructional planning-its importance Phases Types - Year plan, Unit plan, Resource unit, Lesson Templates Procedure, steps and format for the preparation of year plan, unit plan and lesson template Designing lesson templates in Hindi Designing e-lesson templates in Hindi Preparation of teaching-learning materials in Hindi and other resources to be used in classroom practice 	<ul style="list-style-type: none"> Descriptive method Group discussion Demonstration method Co-operative learning Demonstration by experts Preparation of various Lesson Plan/Teaching Manual in small groups 	<ul style="list-style-type: none"> Ability to develop suitable Lesson plan/Teaching Manual Assessing the ability to frame appropriate Objectives and Specifications

Unit: 3 Essential Requirements of Teaching Hindi Education (14 Hrs + 7 Hrs)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. Develop teaching skills through micro teaching practices	<ul style="list-style-type: none"> Essential requirements – Teaching Competencies and teaching skills Micro Teaching- Definitions, Principle and 	<ul style="list-style-type: none"> Experiential learning Reflective practices Demonstration 	<ul style="list-style-type: none"> Assessment of writing Micro teaching lesson notes/plans and schedule

	<p>theory, micro teaching cycle,its limitations,- designing lesson templates for Micro teaching</p> <ul style="list-style-type: none"> • Practice and assessment mechanisms • Link practice : Developing classroom management skill, Recording at least 10 skills or classes and assessment of micro teaching skills by using ICT 	<p>method Analysis of video performance</p>	<ul style="list-style-type: none"> • Reflection of • video recording of own • teaching • Performance in skill presentation
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Unit : 4 Instructional Resources in Teaching and Learning of Hindi (15 Hrs + 8 Hrs)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
<p>1. Understand the inevitable role of instructional support for effective instructional practices</p> <p>2. Generate skills in constructing and using different instructional aids and resources</p>	<ul style="list-style-type: none"> • Learning aids---Preparation of learning aids-- --make use of different types of audio-visual aids--- scope of audio-visual aids for Hindi instruction:hands-on operational facility of modern learning supporting gadgets • Instructional Resources: textbook, workbook, handbook, source book • Resource Mapping • Instructional aids: classification of learning aids: projected, Non-projected and activity aids. • Hands on experience: Computer, LCD Projector, Interactive white board and multi media • Scope of art education in teaching Hindi 	<p>Guided observation Illustration Demonstration General discussion Workshop Displays Demonstration</p>	<ul style="list-style-type: none"> • Text book analysis • Workbook preparation • Handling of various instructional aids • Guided supervision

EDU – 04. 4 : THEORETICAL BASE OF SANSKRIT EDUCATION

[Theoretical discourses-60Hours+ CE -30 Hrs]

OBJECTIVES :

- To develop perspectives on the study of Sanskrit in the global context
- To acquire theoretical knowledge and skills in the learning of Sanskrit language
- To develop an understanding of the nature of language system and to understand the role and importance of Sanskrit and its cultural background
- To analyze and prepare a report on the learning of Sanskrit at school level
- To familiarize with the psychological theories and its application of teaching Sanskrit
- To understand Taxonomy of educational objectives [Bloom] with special reference to Sanskrit
- To understand the aims and objectives of Sanskrit language teaching
- To compare the curriculum of NCERT with SCERT
- To understand about the methods and strategies of teaching Sanskrit and to understand the theoretical bases of major approaches

CONTENTS :

- UNIT I: GENERAL INTRODUCTION TO SANSKRIT LANGUAGE TEACHING AND LEARNING.
- UNIT II: NATURE AND DEVELOPMENT OF SANSKRIT LANGUAGE.
- UNIT III: AIMS AND OBJECTIVES OF TEACHING SANSKRIT.
- UNIT IV: METHODS AND STRATEGIES OF TEACHING SANSKRIT

UNIT I : General Introduction To Sanskrit Language Teaching And Learning [14Hours+6Hours]

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
<p>1. To develop perspectives on the study of Sanskrit in the global context.</p> <p>2. To acquire theoretical knowledge and skills in the learning of Sanskrit language.</p>	<ul style="list-style-type: none"> • Perspectives of Sanskrit studies-Significance in the Global context. Sanskrit as a skill subject. Development of Sanskrit Education in India. Reports of First Sanskrit Commission, Krishnawarrier committee, Second Sanskrit Commission. • Teaching SSL, SFL. Language Teacher Competencies-Ability to develop skills-Teaching its nature-Learning its nature-Teaching as a Profession, Teacher as a Professional-Guide, Friend, Knowledge worker-Facilitator-Scaffolder-Mentor-Motivator-Social Engineer-Reflective Practitioner etc. 	<p>Meaningful Verbal expression.</p> <p>CAI</p> <p>Explanations and Narrative Demonstrations etc.</p> <p>Develop suitable environment for communication.</p> <p>Supply materials for loud reading.</p> <p>Comprehensions and paragraphs. Written competitions.</p> <p>Listening stories and poems, summarise and recite.</p> <p>Comparisons with the learning of English as second language, Malayalam as first language.</p>	<ul style="list-style-type: none"> • -Portfolio and performance. • -Analyze the performances- • -Participant observation- • Individual assessment-Prepare power point presentation in the given topic. • -Participant observation. • Observation. • *CE-Seminar-5-marks.

		Presentation. Lecture method. Explanation. Narration. Group discussion and Presentation.	
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UNIT II: NATURE AND DEVELOPMENT OF SANSKRIT LANGUAGE[12Hours+7Hours]

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To develop an understanding of the nature of language system and to understand the role and importance of Sanskrit and its cultural background. 2. To analyze and prepare a report on the learning of Sanskrit at school level. 3. To familiarize with the psychological theories and its application of teaching Sanskrit.	<ul style="list-style-type: none"> The importance of Sanskrit language and literature. Sanskrit literature an embodiment of high intellect. Sanskrit the language of Indian culture. Sanskrit the speech celestial-Historical- Archeological-and anthropological research-Contribution of Sanskrit to various subjects. Bases of modern vocations-Learning Sanskrit –Its significance-Historical background-World language- Cultural language-Link with other languages. Problems related to Sanskrit teaching at School level. Psycho linguistic theories and its principles in teaching Sanskrit with special reference to 	Meaningful verbal expressions. Lecture cum discussions. Narrative expressions. Collection of Literature. Questionnaire to teachers and students. Lecture cum discussions.	<ul style="list-style-type: none"> Role performance. Individual assessment. References. Presentation of report and Participant observation. Observations. Analyze the performance-Power point presentation. Participant observation- CE-Practicum-10 marks.

	Behaviourism –imitation,repitation,re- reinforcement-[Skinner-Pavlov-Thorndike]- Cognitivism-Schema- [Bruner-Piaget] – Constructivism ZPD-Scaffolding, Mental processes [Vygodsky –Gardener]-Chomsky- LAD-Universal grammar -Krashens Hypotheses-Multiple intelligence-Neuro- linguistic programming.	-Presentation- Meaningful verbal expressions. Group Discussions.	
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UNIT III AIMS AND OBJECTIVES OF TEACHING SANSKRIT[14HOURS+10HOURS]

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To understand Taxonomy of educational objectives [Bloom] with special reference to Sanskrit. 2. To understand the aims and objectives of Sanskrit language teaching. 3. To compare the curriculum of NCERT with SCERT.	<ul style="list-style-type: none"> • Blooms taxonomy of educational objectives [revised] with special reference to Sanskrit • .Aims and objectives of Sanskrit language teaching at different levels-Academic schools- Oriental Sanskrit schools-Higher secondary-Second language and optional Sanskrit- [Primary Secondary, and High school levels].Quality of Sanskrit teaching Pre-class, In class, and after class. • Comparison of the objectives and learning of Sanskrit in NCERT Curriculum with SCERT.. 	Discussions- Lecturing. CAI cum Discussion. Lecture method and Collaborative learning- Assignment and Discussion. -Analyze the peer instruction- Narrative expression and self experience-	<ul style="list-style-type: none"> • Analyze the Group discussion and Participant observation. • Participant observation. • Role performance. • Participant observation. • Oral assessment. • Discussion Lesson Templates-5-15marks. • Demonstration-3 • Criticism-3 • Observation of model video Lessons-2-and reporting-10 marks.

UNIT IV METHODS AND STRATEGIES OF TEACHING SANSKRIT[20HOURS+7HOURS]

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To understand about the methods and strategies of teaching Sanskrit and to understand the theoretical bases of major approaches.	<ul style="list-style-type: none"> • General principles of language teaching. Maxims of teaching. • Approach, Method, Technique- • -SOS Approach, Communicative approach. • Methods of teaching Sanskrit. Traditional method. Bhandarkar method etc. Methods of teaching Prose, Poetry, Grammar and Drama. Modern methods such as Bilingual method ,New method or Text book method, Substitution method, Army method, Audio lingual method, Interactive methods/strategies such as Tutorial, Seminar ,Role-play, Group discussion-Brain storming, Buzz-group, Mind mapping. Visual teaching strategy, Computer assisted teaching and learning, Case-study . 	Meaning full verbal expressions- Lecture method. Group Discussions. Presentation.	<ul style="list-style-type: none"> • Role performances. • Observation. • Participant observation • Roll performance. • CE-Test-5Marks.

REFERENCES : (Common to EDU – 04, 05, 09, 10, 13 & 15)

- Teaching and learning English asource book for Teaching and Teacher training,Orient Long man,Hydrebad.
- An introduction to Language and Communication,Publisher Prentice Hall.
- Active Listioning building skills Marc Helgesen And Steven Brown Camebridge.
- Linguistics –An introduction to language and Communication,Advian Adkmajian and others New Delhi.
- The teaching of language a practical approach,B.N.Safaya.

- The principle and methods of teaching, Bhatia and Bhatia.
- Technology of teaching, R.A. Sharma.
- Models of Teaching- Bruce Joyce- Mersha Wein.
- Introduction of Educational Psychology, K. Sambath, a Panneer Selvam, S. Santhanam.
- Essentials of Educational Technology- Teaching Learning Innovations in Education, J.C. Agarwal.
- Modern trends in Educational technology, Romesh varma, Suresh Sarma.
- Allen .d and Ryan.k.(1969) Micro teaching London, Adison Wesley. o
- Mathrubhasha bodanam p ravanathakalum reethikalum, Bindu.C.
- Taxonomy of Educational objectives, Blooms.B.S.
- Reflections on language- Chom sky.N(1975).
- Audio-visual methods in teaching, Dale 1961.
- National Curriculum Frame Work, NCERT (2005) New Delhi.
- Kerala Curriculum Frame work, SCERT Trivandrum.
- Practical Sanskrit grammer, PRD Sarma.
- Tarkasamgraha of Annambhatta.
- First book of Sanskrit and second book of Sanskrit, Bhandarker.
- A Sanskrit grammer for students, A Macdovel.
- Kuvalayanandam – Appayyadikshitha.
- Vrettarethnakaram of Kedarabhatta.
- Sidhanthakaumudi of Bhattogideeshithar.
- -Laghusidhandakaumudi of Varadarajapandithan.
- -Rasa and Dvani, Dr.A..Sankaran.
- -Kavyaprakasa of Mammata.
- -History of Sanskrit Literature, Keith.
- -Sahityadarpanam, Visvanatha.
- -Sabdabodini , A.R. Rajarajavarma.
- -Vrethamanjary, Pingalamuni.
- -Teaching Sanskrit with new techniques, Prof.Chalanasarma and Dr.Fathesingh.(1996)(2008).
- -Sanskrit Nirukta , N.K.Rajagopal.
- -The teaching of Sanskrit Prof. K. Ramavarmaraja.
- -The teaching of Sanskrit, Pro.G.Sahadevan.
- -Laghusamskritam, Dr.K.G.Poulose.
- -On teaching poetry –Haddon.

- -Samsritadyapana-Visvanathasarma.
- -Sanskritasiksha Ramasuklapandya.
- -The teaching of Sanskrit-D.G.Apte.
- -Language in Education,Omkar N Koul.
- -Sanskrit and ssscience,S.S.Janakikuppu.
- -The problems of Sanskritteaching-Huppanikkar.
- -Samkritasahithyavimarsanam-Dr.NVP.Unnithiri.
- -Keraleeya samskritadyapanavidya-Dr. K.R.Harinarayanan.
- -AUDIO AND VIDEO REFERENCES.
- A work book for Sanskrit learners: DPI 2012 General Education.
- A byasamanjary :CD by DPI
- Vakyamretham :14DVD by DPI.
- Prayogaparichayam :2 CD-DPI.
- Sanskrit related Websights.

EDU – 05.4 : PEDAGOGIC CONTENT KNOWLEDGE ANALYSIS-SANSKRIT

[Theoretical discourses - 60HOURS+ CE -30HOURS]

OBJECTIVES :

- To acquire knowledge in analysing the pedagogic and the linguistic content of Sanskrit Text Books.
- To prepare and design lesson templates of Sanskrit prose poetry, drama. Alenkara and vretta based on the curriculum and text books of Sanskrit .[8-12].
- To develop essential skills in LSRW and core skills based on micro Teaching.
- To appreciate the use of audio-visual aids, ICT, internet and Technology

CONTENTS:

- UNIT-I INTRODUCTION TO PEDAGOGIC CONTENT KNOWLEDGE [PCK]
- UNIT-II PLANNING AND DESIGNING OF LESSON TEMPLATES.
- UNIT-III ESSENTIAL REQUIREMENTS FOR TEACHING OF SANSKRIT
- UNIT-IV RESOURCES IN TEACHING AND LEARNING OF SANSKRIT

UNIT-I INTRODUCTION TO PEDAGOGIC CONTENT KNOWLEDGE[11 HOURS+6 HOURS]

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To acquire knowledge in analysing the pedagogic and the linguistic content of Sanskrit Text Books.	<ul style="list-style-type: none">• Pedagogic Analysis-scope, Principles and objectives.• Pedagogic content knowledge-Scope in teaching and learning.• Content analysis on the basis of Blooms taxonomy.• Concept of objective based instruction and Evaluation.• Instructional objectives ,specification, Issue based learning and Outcome based Learning in Sanskrit.	<p>Presentation- Meaning full verbal expression- Group discussions. Presentation- -Presentation- Grammar Translation</p>	<ul style="list-style-type: none">• -Role performance-• Role performance-• Analyze and Participant observation• Observation.• Observation.• Role performance.• Subject associated activity— 5Marks.

	<ul style="list-style-type: none"> • Analysis of Linguistic content[vocabulary, synonymous, Anonymous, Gender, Singular, Plural words, ideoms, and phrases] • Grammar ,Subanthas Thinganthas-Cases-Tenses-and moodes [प्रकारIs]. Comparative study of Structure of sentences, in Hindi and Malayalam with Sanskrit. 	method.	
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UNIT-II PLANNING AND DESIGNING OF LESSON TEMPLATES[20HOURS+12HOURS]

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To prepare and design lesson templates of Sanskrit prose poetry, drama. Alenkara and vretta based on the curriculum and text books of Sanskrit .[8-12].	<ul style="list-style-type: none"> • Pedagogic analysis of lesson – meaning and principles of content analysis – subject matter and language learning experiences – evaluation –Importance of planning in Education. Different approaches in Lesson planning. [Herbartian, Constructivistic, Issue based,Out- come based]- lesson planning-objective based and outcome based Lesson plans – Year plan- unit-plan-Daily Lesson plan- • Lesson Templates [Prose [Stories, drama. Essays, Conversations, Narrations, etc. Poetry, Grammar, Alenkara , and Vretta.] • - model class- 	<p>Lecture cum discussion.-meaning full verbal expression</p> <p>group discussion – presentation –</p> <p>Document analysis and peer instruction –</p> <p>-makes trainee recall the method of teaching –</p> <p>Presentation of model lesson plans.</p> <p>Discussion.</p>	<ul style="list-style-type: none"> • Observation. analysis in group discussion- • participant observations • optional level focused group discussion – • examining the level of participation- • Performance in class room discussions teaching performance in classroom discussion teaching performance entry recorded –in reflective journal- • Practical • discussion lessons [five] • demonstrations[three] • Criticism lessons.[Five]

		Demonstration class. Expert Lessons-Video observation and reporting.[any two]	<ul style="list-style-type: none"> • observation of video lesson and reporting
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UNIT III ESSENTIAL REQUIREMENTS FOR TEACHING OF SANSKRIT[16HOURS+6HOURS]

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To develop essential skills in LSRW and core skills based on micro Teaching.	<ul style="list-style-type: none"> • Observation and practice of Listening s LSRW. . • Meaning of micro teaching – objectives of micro teaching – Meaning and concept. Concept-Phases and Circles -skill based practice – 7 skills [core skills.] - stimulus variation -questioning - re-inforcement - Using blackboard. - Introduction. - Explaining. - Using teaching aids.and Three any other skills. One skill per student,include skills for modern classrooms. 	<p>Lecture method demonstration and practice.</p> <p>Group discussion- observations- presentation – narrative expression session in small groups –</p> <p>Makes trainee recall the art of teaching – use film related teaching skills ,web based resources –</p> <p>Individual Performance. Recording.</p>	<ul style="list-style-type: none"> • Performance in group discussion • participation - • Observation- • -optional level focused groups discussion – • entry recorded in reflective journals – • Micro teaching 2 skills- 15marks. • observation of recorded performance of individual students. • Practical -10 Marks.

UNIT IV :RESOURCES IN TEACHING AND LEARNING OF SANSKRIT[13HOURS+6HOURS]

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
<p>1. To appreciate the use of audio-visual aids, ICT, internet and Technology.</p>	<ul style="list-style-type: none"> • The importance of Teaching aids in learning process-design and development- • Learning support resources- pictures-charts-Flash cards-Models –News papers and Journals-Documentary-Audio-video clips-Interactive board- LCD Projector- Internet-Language lab-Resource mapping. 	<p>Lecturing and Demonstration of teaching aids.</p> <p>Discussion.</p> <p>Group activities.</p> <p>Preparation of learning aids in workshops.</p> <p>Demonstration and observation of Language lab.</p> <p>Preparation and practice of lesson plans based on ICT, internet, and different audio –visual aids.</p>	<ul style="list-style-type: none"> • Participant observation. • Role performance • Participation. • Role performance. • Participation. • Competence to use this language lab • Performance of students. Examination of lesson templates • Test-5 Marks. • Field trip-10 marks.

EDU. 04.5: THEORETICAL BASE OF ARABIC EDUCATION

(Theoretical Discourses. 60hours and CE. 30 hours)

Objectives

- On completion of the course the student teacher will be able to :
- Familiarize with the functional aspects of teaching and learning and the divergent roles expected to be an Ideal Teacher
- Acquaint with the meaning, nature and characteristics of language
- Grasp knowledge about the nature and scope Arabic Language
- Familiarize with the aims and objectives of Arabic Language teaching and learning
- acquaint with the Taxonomy of Educational Objectives
- Develop the ability to apply theories related to Language teaching
- Develop Knowledge of acquisition of basic language skills
- Familiarize with traditional and modern methods, approaches & strategies of language teaching
- Update Knowledge of current approaches and methods & techniques of teaching
- Develops the ability to choose the effective Methods, Approaches, strategies techniques for classroom teaching
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Contents

UNIT 1: GENERAL INTRODUCTION TO TEACHING AND LEARNING:

UNIT II: NATURE AND DEVELOPMENT OF ARABIC LANGUAGE

UNIT III: AIMS AND OBJECTIVES OF TEACHING ARABIC LANGUAGE

UNIT IV: METHODS AND STRATEGIES OF TEACHING ARABIC LANGUAGE :

UNIT 1: General Introduction to Teaching and Learning

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. The student teacher will be able to familiarize with the functional aspects of teaching and learning and the diverse roles expected to be an Ideal Teacher	<ul style="list-style-type: none"> • Language Learning : Perspectives • Teaching and Learning : its Nature and significance • Maxims of Teaching • Learner and Teacher • Inter dependence of Teaching & Learning. • Changing concept of Teaching, learning , classroom environment; • CWW (classroom without walls), • VLE (Virtual Learning Environment.) • Competency Based Language Teaching (CBLT) • Language teacher competencies 	Introductory Lecture Discussion Group Discussion Observation Narration	<ul style="list-style-type: none"> • CE • Assignments • TE

UNIT II: NATURE AND DEVELOPMENT OF ARABIC LANGUAGE

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. The Student Teacher will be able to acquaint with the meaning, nature and characteristics of language 2. The student teacher will be able to grasp knowledge about the nature and scope Arabic Language	<ul style="list-style-type: none"> • Language : Meaning, definitions • Characteristics and functions • Language and Culture • Basic Concepts: Morphology, Phonology, Syntax, semantics. • First Language, Second Language & Foreign 	Lecture Discussion Debate Seminar	<ul style="list-style-type: none"> • CE • Assignments • Seminar reports • TE

<p>3. To develop Knowledge of acquisition of basic language skills</p>	<p>language</p> <ul style="list-style-type: none"> • Arabic as a Second language& foreign Language • Nature and Scope of Arabic Language • Need & Significance of Arabic Language teaching and learning • Problems of learning Arabic as a second language • Acquisition of Language • Language Skills: LSRW • Receptive skills & Productive skills • Listening skill ; Significance of listening • Speaking skill :Importance of speaking, Pronunciation • Reading skill: Importance of reading skill • Types of reading :Loud Reading, Silent Reading; advantages • Intensive reading, Extensive reading; advantages • Skimming and scanning • Writing Skill: Importance of writing skill • Types of writing, Characteristics of good handwriting • Reference & Study Skills: • Importance of reference and study skills • Use of dictionaries & encyclopedias • Online references 	<p>Brainstorming</p>	
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UNIT III: AIMS AND OBJECTIVES OF TEACHING ARABIC LANGUAGE

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. The student teacher will be able to acquaint with the aims and objectives of Arabic language teaching	<ul style="list-style-type: none"> • Aims and Objectives of Teaching and learning Language • Socio- cultural & utilitarian aims • Principles of Language Learning • Objective Based Instruction • Blooms Taxonomy of Educational Objectives (original & revised) • Objectives and Specifications • Process Oriented Teaching and learning • Outcome based Learning (OBL) • Developing communicative competencies • Addressing Learner sensibilities and abilities 	Lecture Interactive session Discussion Debate Online reference	<ul style="list-style-type: none"> • CE • Assignments/ • Project • TE

UNIT IV: METHODS AND STRATEGIES OF TEACHING ARABIC LANGUAGE

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. The student teacher will be able to develop the ability to apply theories related to Language teaching 2. Familiarize with the traditional & modern methods, approaches, techniques of language teaching 3. Develop the ability to choose the	<ul style="list-style-type: none"> • Application of Psychological Principles : • Behaviourism, Cognitivism, Constructivism, Social constructivism, Chomskyan Concept (LAD & Universal Grammar), Krashen's Hypothesis • Approaches, Methods & Techniques • Traditional and Modern Methods: 	<ul style="list-style-type: none"> • Introductory Lecture • Discussion • Demonstration • Debate • Video lesson observation • Online reference 	<ul style="list-style-type: none"> • CE • Assignments • TE

<p>most suitable methods, Approaches, strategies and techniques in Arabic language teaching and learning</p>	<ul style="list-style-type: none"> • Grammar Translation Method, Bilingual Approach, Direct Method, Structural approach, • Communicative Approach, Eclectic Approach, Play way Method, Project Method • Role play , Dramatization, Narrative strategies • Discourse based language learning, Learning by doing, Activity Based Teaching and Learning • Approaches/ Methods of teaching Language elements: • Inductive and deductive methods, Functional and formal grammar • Approaches, Methods & Techniques of teaching Language skills : • Listening Skill , Speaking skill developing speaking & Listening Skills, • Causes of bad pronunciation, Techniques of teaching good pronunciation • Methods and techniques of teaching Reading skill • Methods and techniques of teaching Writing skill: Dictation, Creative writing, Editing Process • Critical Evaluation of the Methods of Teaching 		
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References:

- Al thadrees wa Iadad al Muallim: Dr.S Abdulrahman qindeel Dar al Nashr al Duwali

- Becoming Better Teachers: Micro Teaching Approach, Sahitya Mudranalaya , Ahmadabad
- Thatweeru Adai -al Muallim; kifayathu thaaleem wa thahleel al muthawasila : Hashim Uwaidha, Dar al Ilm al Malayeen , Labanan
- Thareeqathu Thadreesi Wa strateejyathuhu: Dr Muhammed Mahmmod al Haila, Dar Al Kitab Al Jamia, Al ain, UAE
- Al Mawajjah Al Fanni LiMudarrisee al Lughal Al Arabiyya: Abdul Aleem Ibrahim; Dar al maarif, Al qahira
- Thaaleem al lughal al Arabiyya lighairi al nathiqeena biha : Makthab al tharbiyya al Arabi liduwal al Khaleej
- Ilmu al lughal; Muqadhimah lil qaria al Arabi: Dr. Mahmood Al Saaran, Dar al- N ahda al Arabiyya
- Thuruqu thadrees al lughal al Arabiyya lil madaris al muthawassitha wa thanaiyya : Hasan Mulla Uthman ; Dar alam al Kuthub lithbaa wa nnashshr wa thouzeea, Riyadh, KSA
- Thaqnolojiya al Thaaleem; Al wasail al thaaleemiyya wa thaqniyyath al thaaluum: Dr. Muhammed Assam Tharbay , Dar Hammurabi lilnashri wa thouzeea
- Asaleeb Wa Thuruqu al-Thadrees al Hadeesa : Dr. Muhammed Assam Tharbaya; Dar Hammurabi lilnashri wa thouzeea
- Providing teachers effective strategies for using technology tech trends: Brown B& Henscheid
- The systematic Design for Instruction: Dick, W& L(1990)
- Istheeratheejyath wa Maharah al Tharees :Kamal al Jundi; Dar al Jumhooriya lilthibaa
- Wasaail al Ithisal wa thaknologia fithaaleem :Dr Abd al hafiz muhammed salama ,Dar al Fjkar
- Murshid al Muallim: Richard D. C ; Aalam al Kutub al Qahira
- Al Thadrees Ahdafuhu wa usasuhu wa Asaleebuhu Thaqweemu Nathaijuhu wa Thathbeeqathuhu: Dr Fikri Hasan Rayan, Aalam al kutub , al qahira
- Madkhal Ila Tharbiya al muthamayyizeena wal Mauhoobeen, Dar al fikar lial thibaa wa Nashr
- Thaqniyyath al thaaleem(Mafhoomuha wa douruha fi thahseeni amaliyyath al thaaleem wa thaallum: Badar Salih
- Al tharbiya wa thuruqu thadrees: Salih Abdul Azeed& Abdul Azeed Abdul Majeed; Dar al Maarif, Al Qahira
- Al Muwajjah al Amali li Mudarrisee al Lughal Al Arabiyya: Abid Thoufeeq al Hashmi; Al Risala publishing House, Bairut
- Kaifa Thulqi Darsak: Yabhasu fi usooli al tharbiyyath wa thadrees, Dar al Ilm lil Malayeen , Bairut.

EDU. 05.5 : PEDAGOGIC CONTENT KNOWLEDGE ANALYSIS-ARABIC.

(Theoretical Discourses. 60hours and CE. 30 hours)

Objectives

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

- Acquaint with an understanding of pedagogic content knowledge analysis
- Familiarize with the nature of the content /text book and analyze it pedagogically
- Develop the ability and acquires the teaching skills by practicing complex skills of classroom teaching
- Develop knowledge of the importance of planning in teaching
- Develop the ability to design lesson templates incorporating the relevant objectives and activities
- Acquire the ability to plan lessons and use in classroom teaching
- Develop the ability to apply suitable Teaching Aids in classroom teaching

Contents

UNIT I : INTRODUCTION TO PEDAGOGI CONTENT KNOWLEDGE(PCK) :

UNIT II: PLANNING & DESIGNING OF LESSON TEMPLATES

UNIT III: ESSENTIAL REQUIREMENTS OF TEACHING ARABIC LANGUAGE

UNIT IV : RESOURCES IN TEACHING AND LEARNING OF ARABIC LANGUAGE

UNIT I: Introduction to Pedagogic Content Knowledge (PCK):

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. The student teacher will be able to develop an understanding of pedagogic content knowledge Analysis 2. Familiarizes with the nature of text book and analyses pedagogically	<ul style="list-style-type: none"> • Content Knowledge and Pedagogic Knowledge • Pedagogic Content Knowledge • Pedagogic Content Knowledge analysis: scope, principles and objectives • Steps involved in pedagogic content knowledge analysis 	Introductory Lecture Discussion Group Discussion	<ul style="list-style-type: none"> • CE • Assignments/ project • TE

	<ul style="list-style-type: none"> • Pedagogic Analysis of language discourses :Conversation, poem, rhyme, slogan, speech, notice, report, message, letter, poster, advertisement, write-up, profile, biography, essay, story, Quran & Hadith, narration etc. • Pedagogic Analysis of language elements: grammar, vocabulary, structures, rhetoric & prosody etc. • Pedagogic Analysis of Arabic Text Books prescribed for the State Schools of Kerala from 6th std to 12th std • Critical Analysis of Arabic H B& TB for VIII to X std of the state schools 	<p>Observation</p> <p>Narration</p>	
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UNIT II: Planning and Designing of Lesson Templates

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
<ol style="list-style-type: none"> 1. Develop knowledge of the importance of planning in teaching 2. Acquire the ability and skills to plan lessons and use in classroom teaching 3. Develop the ability to design lesson plans incorporating the relevant objectives and activities 	<ul style="list-style-type: none"> • Planning in Teaching : Importance of planning in teaching • Objectives of Planning Different levels of Planning :Year plan, Unit plan, lesson plan • Planning and designing of lesson templates • Steps involved in preparing lesson template • Designing lesson templates for different language discourses& language elements 	<ul style="list-style-type: none"> • Introductory Lecture • Discussion • Group Discussion • Observation • Narration 	<ul style="list-style-type: none"> • CE • Assignments/ project • TE

UNIT III: ESSENTIAL REQUIREMENTS OF TEACHING ARABIC LANGUAGE

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
<ol style="list-style-type: none"> 1. Familiarizes with ways of employing teaching skills for effective teaching 2. Practice teaching skills 3. And apply it effectively 	<ul style="list-style-type: none"> • Teaching Skills :Pre teaching skills & post teaching skills • Core skills in teaching : stimulus variation, introducing ,explaining, questioning, response management, • Application of ICT skills / Black Board, White Board, & Interactive Board • Practicing teaching skills : • Micro Teaching: the concept, Micro teaching cycles, Link practice • Preparing of Micro Teaching Lesson Plans 	Introductory Lecture Discussion Group Discussion Observation Narration	<ul style="list-style-type: none"> • CE • Assignments • TE

UNIT IV: RESOURCES IN TEACHING AND LEARNING OF ARABIC LANGUAGE

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
<ol style="list-style-type: none"> 1. Familiarizes with ways of developing different teaching aids and applying in classroom teaching 2. Acquire the ability to apply suitable Teaching Aids in classroom teaching 	<ul style="list-style-type: none"> • Teaching Learning Materials(TLM) : Psychological Bases • Teaching aids, its design and development : • Audio, video, audio-video, Graphic and improvised aids, Projected and non projected aids • Animated and digital aids, Language Lab, Multi media aids 	Introductory Lecture Discussion Group Discussion Observation Narration	<ul style="list-style-type: none"> • CE • Workshop products • Observation • Reports • collections • TE

	<ul style="list-style-type: none"> • Activity Aids: Jama'iyyathul Arabiyya al adabiyya, nadiyathu lluga, majallathul arabiyya wal jidariyya • wa nuskhiyya, idaathul arabIyya, ialanathul arabiyya, maharjan al adabil arabi, al thaaleef wa thasdeer • Wassahafa, al mushaira, al siyaha al dirasiyya, zawiyathul qiraa etc. • Teaching Learning Resources:TB & HB, its characteristics and qualities • Other resources: Supplementary Readers, Local Text, Zero Test, Live Text, Static Text etc. 		
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References:

- Al Muallim al Najih:, Dr. Abdullah al Amiri, Dar Usama li -nashir wa thouzeea'
- Thatweeru Adai -al Muallim; kifayathu thaaleem wa thahleel al muthawasila : Hashim Uwaidha, Dar al Ilm al Malayeen , Labanan
- Thuruqu thadrees al lugha al Arabiyya lil madaris al muthawassitha wa thanaiyya : Hasan Mulla Uthman ; Dar alam al Kuthub lithbaa wa nnashshr wa thouzeea, Riyadh, KSA
- Thaaleemu al lugha al arabiyya baina nadriyya wa thathbeeq: Dr Hasan Al Shahatha, Dar Misriyya wa llubnaniya
- Mushkilathu thaaleemu llughal Arbiyya: Abbas Mahmood ; Dar alsaqafa, Qatar
- Thareeqathu Thadreesi Wa strateejiiyyathuhu: Dr Muhammed Mahmmod al Haila, Dar Al Kitab Al Jamia, Al ain, UAE
- Al Mawajjah Al Fanni LiMudarrisee al Lughal Al Arabiyya: Abdul Aleem Ibrahim; Dar al maarif, Al qahira
- Thaaleem al lugha al Arabiya lighairi al nathiqeena biha : Makthab al tharbiyya al Arabi liduwal al Khaleej
- Ilmu al lugha; Muqadhima lil qaria al Arabi: Dr. Mahmood Al Saaran, Dar al- N ahda al Arabiyya
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- Asaleeb Wa Thuruqu al-Thadrees al Hadeesa : Dr. Muhammed Assam Tharbaya; Dar Hammurabi llnashri wa thouzeea
- Providing teachers effective strategies for using technology techrends: Brown B& Henscheid
- Istheeratheejiyyath wa Maharah al Tharees :Kamal al Jundi; Dar al Jumhooriya lilthibaa
- Wasaail al Ithisal wa thaknologia fithaaleem :Dr Abd al hafiz muhammed salama ,Dar al Fjkar

- Al thadrees wa Iadad al Muallim: Dr.S Abdulrahman qindeel Dar al Nashr al Duwali
- Murshid al Muallim: Richard D. C ; Aalam al Kutub al Qahira
- Al Thadrees Ahdafuhu wa usasuhu wa Asaleebuhu Thaqqweemu Nathaijuhu wa Thathbeeqathuhu: Dr Fikri Hasan Rayan, Aalm al kutub , al qahira
- Madkhal Ila Tharbiya al muthamayyizeena wal Mauhoobeen, Dar al fikar lial thibaa wa Nashr
- Thaqqniyyath al thaaleem(Mafhoomuha wa douruha fi thahseeni amaliyyath al thaaleem wa thaallum: Badar Salih
- Kuthub al Mudariseen lil madaris al thanawiyya: Majli al wilaya lilbuhuzu thabaviyya wathadreeb
- Al tharbiya wa thuruqu thadrees: Salih Abdul Azeed& Abdul Azeed Abdul Majeed; Dar al Maarif, Al Qahira
- Kaifa Thulqi Darsak: Yabhasu fi usooli al tharbiyath wa thadrees, Dar al Ilm lil Malayeen , Bairut.
- Al Muwajjah al Amali li Mudarisee al Lugha Al Arabiyya: Abid Thoufeeq al Hashmi; Al Risala publishing House, Bairoot
- Taxonomy of Educational Objectives : Bloom ,B.S.et al (1968)Handbook , D.Mc , New York
- A taxonomy of learning, teaching & assessing: A Revision of Blooms taxonomy of educational objectives : Anderson, LW& Krathwohl, DR(2001), New York, Longman
- Teaching Strategies: A guide to better instructions, HMCo. New York

EDU- 04.6 : THEORETICAL BASE OF TAMIL EDUCATION

(Theoretical Discourses- 60 & CE – 30 hours)

Objectives:

The student teacher :

1. Familiarizes with the nature and purpose of language teaching.
2. Grasps problems related to learning a Second Language.
3. Draws implications of different theories of learning for Second Language instruction.
4. Gets an awareness of Approaches, Methods and Instructional Strategies for teaching Tamil.

Contents :

- Unit 1 :General Introduction to Tamil Language Teaching and Learning
 Unit 2 :Nature and Development of Tamil Language
 Unit 3 :Aims and Objectives of Teaching Tamil
 Unit 4 : Methods and Strategies of Teaching Tamil

Unit 1: General Introduction to Tamil Language Teaching and Learning (25 hours)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. Student teacher familiarizes with functional plane of teaching and learning and the divergent roles expected to be played as Language Teacher 2. Grasps the current status of Tamil and its importance	<ul style="list-style-type: none"> • Perspectives of Tamil Studies • Significance in the Global context • Tamil – Classical Language • Tamil as a skill subject • Teaching Tamil as a First Language [L1] Second Language [L2] and Third Language [L3] • Bilingualism • Three Language Formulae – Mother tongue Interference 	Makes student recall qualities of teachers whom they admire/remember Narration, anecdotes of lives of teachers who served as role models Views films related to	<ul style="list-style-type: none"> • Contribution in debate on need of Tamil as an Classical Language • Performance in classroom discussions regarding teacher role • Entry recorded in Reflective journal

	<ul style="list-style-type: none"> • Tamil as a Link Language • Language teacher competencies • Roles and Responsibilities of Tamil Teacher-mentor, facilitator, scaffolder, reflective practitioner 	<p>teachers/teaching</p> <p>Reads stories about lives of great teachers</p> <p>Web-based resources</p>	
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Unit 2:Nature and Development of Tamil Language(20 hours)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. Gathers knowledge about meaning, nature and characteristics of language and select theories of language teaching and learning	<ul style="list-style-type: none"> • Language and culture , Language and society, Language and media(print and digital) • Behaviourism- imitation, repetition, reinforcement • Multiple Intelligence 	<p>Brain storming</p> <p>Seminar</p> <p>Presentations</p> <p>Quiz</p> <p>Peer Tutorial</p> <p>Discussion</p> <p>Invited Talks</p>	<ul style="list-style-type: none"> • Examine level of participation • Role performance analysis • Evaluation based on documentation

Unit 3:Aims and Objectives of Teaching Tamil (20 hours)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. Develops an understanding of the principles of language teaching	<ul style="list-style-type: none"> • Utilitarian aim, Socio-cultural aims • -Objectives of Teaching Tamil • -Principles of Language Learning • -Ideology of teaching Tamil in classrooms; Addressing learner sensibilities and learner abilities in language learning; Developing communicative competence 	Brain storming Quiz Discussion Assigned readings from the works of theorists Group discussion	<ul style="list-style-type: none"> • Examine level of participation • Evaluation based on documentation • Examine student report • Address the level of pupil involvement in Group Discussion

Unit 4:Methods and Strategies of Teaching Tamil (25 hours)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. Familiarizes with traditional approaches and methods of language teaching 2. Updates Knowledge of current approaches and methods 3. Develops the ability to choose the most suitable method for a given content or group of learners	<ul style="list-style-type: none"> • Approach, Method, Technique • Teaching Methods –Grammar, Prose, Poetry • Student Centered Method and Teacher Centered Method • Inductive and Deductive Method 	Demonstration of steps followed in different methods Watching video recordings Accessing Online input on the topic Co-relating class room activities	<ul style="list-style-type: none"> • Evaluate the competence to compare and contrast • Monitor the ability to distinguish between similar concepts, phases

References (for EDU – 04, 05, 09, 10, 13 & 15)

- Rediyar, subbu N, Tamil Karpium Muraikal
- Rajan, Govinda M, Nattamil Karpithalum Muraikalum
- Ponnappan P, Tamil Paadam Cholum Murai (vol I & II)
- Nathan, Meenakshi S, Notes of Teaching Tamil, Manonmaniam sundarnar University Publication
- Parasuraman, S Tamil Kamithalil Paryerchikal
- Gurney P, Teaching of Mother Tongue
- Rylburn, Suggestion of Teaching of Mother Tongue
- Nathen, Meenakshi et al, Tamil Grammar of std VIII & IX (SCERT)
- Tamil Nadu Text Book society Publication, Tamil Grammer for std VIII & X
- Nannool Kaandikai Urai Pavanantham Pilla Commentary
- VisakaperimaiP, Annai Ilakkanaram. Saiva Sithandam Publication
- Iyengar, Ragava M. Porulathikara Arachichi
- Muthishanmugham, Thekkaiamoyliyai,
- Raja Ram, Tamil Phonetic Reader, Central Institute of Languages, Mysore
- Paranthamanar, A. Nalla Tamil Ezhuthu Karuthum
- Velupillai, Tamil Ilakkiyalin Kaalamum Karutum
- Varadarajan M, Tamil lakkiga Varalam, Sakitay Academy Pbulications
- Mandstein CH , Modern Language Teaching
- Rediyyar, Subbu, Tamil Karpikkum Muraikal
- Govinda Rajan, M Nattamil Pariyuttum Nookam Muriyum
- Govinda Rajan, M. Paliluttu Paiurchium, Mozchiaciriyar-Gazhumy
- Govinda Rajan, Mozhi Thiregalghum, Cila cikkalaga-lum
- Billows, The techniques of language teaching, New Delhi: Longmans
- Dalki J, The Language Laboratory and Language Learning. New Delhi: Longmans

EDU- 05.6 : Pedagogic Content Knowledge Analysis : Tamil.

(Theoretical discourses -60 & CE – 30 hours)

Objectives:

The student teacher:

- Familiarizes with the different dimensions of Pedagogic Content Knowledge.
- Develops an understanding of objectives and specifications for teaching Tamil as a Second Language.
- Familiarizes the procedure and steps for planning different kinds of lesson.
- Analyzes Secondary Course Books and identifies suitable strategies for transacting content.
- Explores ways of designing appropriate learning aids.
- Identifies suitable strategies for assessment.

Contents ;

Unit I: Introduction to Pedagogic Content Knowledge (PCK)

Unit II: Planning and Designing of Lesson Templates

Unit III: Essential Requirements for Teaching of Tamil

Unit IV: Resources in Teaching and Learning of Tamil

Unit 1: Introduction to Pedagogic Content Knowledge (PCK)- 25 hours.

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
<ul style="list-style-type: none"> • Develops an understanding of pedagogy and its principles • Familiarizes with Taxonomy of Educational Objectives • Develops an understanding of types of thinking • Familiarizes with the nature of a Course Book 	<ul style="list-style-type: none"> • Pedagogic Analysis - Scope, Principles and Objectives • Pedagogic Content Knowledge- Scope in teaching and learning • -Objective-based Instruction - Bloom's Taxonomy: Specifications, -Process skills & Thinking Skills (Critical 	<ul style="list-style-type: none"> Direct instruction Engaging in Group discussion Individual and collaborative tasks Critique of different 	<ul style="list-style-type: none"> • Participation in task. • Peer • assessment of • presentations

	<p>and Creative), Problem Solving</p> <ul style="list-style-type: none"> • Content Analysis - Themes, Language elements, Sequencing of content, Deficiency in content-Discourses- slogans, placards, notices, reports, diary entry, messages script of a speech, letter, posters, advertisement, write up, conversation, profile etc. 	Course Books	
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Unit 2: Planning and design of lesson templates (25 hours)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
<p>1. Familiarizes the procedure and steps for planning different kinds of lesson.</p> <p>2. Analyzes Secondary Course Books and identifies suitable strategies for transacting content.</p>	<ul style="list-style-type: none"> • Planning- Relevance, mode and Design-Year Plan-Unit Plan - Lesson Templates • Components and Strategies for teaching: • Prose- Intensive and Extensive reading; Skimming and Scanning, • Silent and Oral reading, Pre-reading and Post-reading • Poetry- Appreciation, Deviant language of Poetry • Grammar- Formal and Functional, Inductive and Deductive methods, • Vocabulary - Content and Function words, Active and passive vocabulary, Techniques and Strategies for enriching vocabulary 	<p>Workshop mode to identify Objectives, Specifications and appropriate testing mechanisms</p> <p>Critiquing Syllabus Grids in Course Book</p> <p>Intro. lectures on thinking skills</p> <p>Demo. by expert</p> <p>Preparation of Group Lesson Plan/Teaching Manual</p> <p>Practice under</p>	<ul style="list-style-type: none"> • Ability to develop • suitable Lesson • Plan/ • Teaching Manual • for different content • Phased monitoring • Performance in • Workshop • Checking ability • to frame appropriate • Objectives and • Specifications

		supervised guidance Task-directed discussion and Applied exercises	
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Unit 3: Essential requirements for teaching of Tamil (20 hours)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. Familiarizes with different teaching skills	<ul style="list-style-type: none"> • Analysis and Practice of Language Skills-LSRW • Identification and Practice of Language Elements - structure, vocabulary etc. • Core Skills of Teaching- <ul style="list-style-type: none"> - Introduction - Illustrating with examples - Explaining - Questioning - Stimulus Variation- Reinforcement - Using Blackboard- Using teaching aids - Response Management-Classroom Management - Reading -Recitation • -ICT skills • Micro Teaching-Concept, Phases and Cycle 	Peer observation using Schedule Videography for reflection Supervised guidance	<ul style="list-style-type: none"> • Use of Observation schedule • *Reflection • write- up submitted following viewing of video recording of own teaching

Unit 4: Resources in teaching and learning of Tamil (20 hours)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. Familiarizes with ways of employing different aids for teaching different content 2. Explores ways of designing appropriate learning aids.	<ul style="list-style-type: none"> • Teaching aids- design and development -Learning support resources -Pictures-Charts-Flash Card-Models- News paper and Journals-Documentary • Audio-Video Clips-Interactive Board-LCD Projector-Internet-Language Lab 	Display of specimen aids Guidance for preparation of aids for different content in workshop mode	<ul style="list-style-type: none"> • Peer comment • Guided supervision

EDU- 04.7: THEORETICAL BASE OF MATHEMATICS EDUCATION.

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

Objectives:

- To make the novice student teachers understand the scope and nature of Mathematics teaching at different levels of learning
- To introduce Mathematics teacher with a futuristic perspective as an agent of social change
- To acquire the fundamentals of theory and practice of principles and procedures of teaching and learning of Mathematics
- To develop an understanding of different methods, strategies and techniques possible in teaching and learning of Mathematics

Contents:

- **Unit I : Introduction to teaching and learning**
- **Unit II: Nature, Scope and Development of Mathematics**
- **Unit III: Aims and Objectives of Teaching Mathematics**
- **Unit IV: Methods and strategies of teaching**

Unit I: Introduction to teaching and Learning (10 hours)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To understand the various roles of Mathematics teacher 2. To familiarize and develop general and specific competencies 3. To generate a knowledge of phases of teaching 4. To understand the qualities of a good mathematics teacher 5. To acquaint with the concept of classroom without walls	<ul style="list-style-type: none"> • Teacher • Role- *Knowledge manager • Facilitator • Scaffolder • Mentor • Social Engineer • Reflective practitioner • Competencies-Professional competencies of a Mathematics teacher • Qualities of a good teacher • Teaching 	<ul style="list-style-type: none"> • Meaningful Verbal • Explanation • Group Discussion • Peer tutoring • Power point presentation • Assignments 	<ul style="list-style-type: none"> • Performance assessment in • group discussion • Tests • Peer evaluation • Evaluation of assignments

	<ul style="list-style-type: none"> • Phases of teaching(Pre-active, Interactive and Post- active teaching) • Maxims of Teaching /Learning • Teacher behaviour and Learning • Class Room • Concept of Virtual Learning Environment(Class room without wall) 		
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Unit II: Nature, Scope and Development of Mathematics (13 hours)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
<ol style="list-style-type: none"> 1. To familiarize with various definitions of Mathematics 2. To understand the nature and scope and characteristics of Mathematics 3. To acquaint with development of Mathematics 4. To inquire into the Contributions of great Mathematicians 5. To understand the values of learning Mathematics 6. To identify different types of correlation of Mathematics 	<ul style="list-style-type: none"> • Meaning and Definition of Mathematics • Nature and scope of Mathematics • Characteristics of Mathematics • Language of Mathematics • Role intuition inductive and inductive reasoning • Development of Mathematics • Human needs as the basis of growth of Mathematics as a structured science-undefined terms, postulates, axioms and theorems pure and applied mathematics • Euclidian and non-Euclidean Geometry • Contributions of great Mathematicians- • -Pythagoras, -Rene Descartes, -C.F.Gauss, Aryabhatta, -Bhaskaracharya, -Brahmagupta, and -Sreenivasa Ramanujam • Values of learning Mathematics : 	<p>Meaningful Verbal Explanation Group Discussion Peer tutoring reflective dairy Collaborative Interaction and Role Play Power point presentation Assignments Brain storming</p>	<ul style="list-style-type: none"> • Analysis of students • Performance • _ Peer Evaluation • _ Poster • Presentation • Evaluation of reflective dairy • Questioning • Class tests

	Utilitarian, Disciplinary, Cultural, Aesthetic, Social, Moral, International etc. <ul style="list-style-type: none"> • Correlation of Mathematics with life, other subjects and different branches of the same subject 	Group discussions Seminar	
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Unit III: Aims and Objectives of Teaching Mathematics (20 hours)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To understand the aims and objectives of teaching mathematics 2. To introduce the Blooms taxonomy of educational objectives under three domains 3. To familiarize with the revised version of Bloom's taxonomy of educational objectives 4. To compare and contrast the objectives of teaching mathematics listed in NCF and KCF	<ul style="list-style-type: none"> • Aims of teaching Mathematics • Meaning of objectives. • Instructional objectives and Specifications • Concept of Objective based instruction • Blooms taxonomy of educational objectives Cognitive domain, Affective domain, and Psychomotor domain • A conceptual overview of revised Bloom's taxonomy of objectives of teaching/ learning (Anderson and Krawthwohl),1990. • A conceptual overview of Technology Integrated Taxonomy, Peck and Wilson,1999 • Objectives of teaching mathematics as enumerated by NCF(2005) and KCF(2007) 	Meaningful verbalpresentation Power pointpresentations Illustrations Seminars Role play Collaborative and Cooperative learningstrategies	<ul style="list-style-type: none"> • Performance analysis in group discussions • Observation • Participation in the Seminar sessions • Examples cited in their lecturenote • Questioning • Summative evaluation • _ Participation in the Seminar sessions

Unit IV: Methods and strategies of teaching Mathematics (17 hours)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
<p>1. To understand various methods and approaches, useful for effective transaction of mathematics</p> <p>2. To familiarize with various techniques useful for individualizing Mathematics instruction</p>	<p>Methods and approaches</p> <p>Procedure, merits & demerits of:</p> <ul style="list-style-type: none"> • Lecture method ▪ Inductive Deductive method • Analytic -Synthetic method ▪ Laboratory method ▪ Project method • Problem solving method ▪ Heuristic approach <p>Concept of Questioning, -Features of good questions and Good questioning</p> <p>Techniques for individualizing instruction</p> <ul style="list-style-type: none"> ▪ Assignments ▪ Homogeneous grouping ▪ Supervised study ▪ Drill work ▪ Dalton plan 	<p>Group discussions</p> <p>Role play</p> <p>Meaningful verbal presentation</p> <p>Collaborative and Cooperative learning Strategies</p> <p>Power point presentations</p>	<ul style="list-style-type: none"> • Participant observation • Performance assessment in classroom activities • Individual work and in Group work. • Summative evaluation

References :

- Aggarwal, J.C. (2001). Principles, Methods & Techniques of Teaching (2nd ed.). New Delhi: Vikas Publishing House Pvt. Ltd.
- Anderson, W. Lorin., and Krathwohl, David. R., A Revision of Bloom's Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives Complete (Edn.)

- Bagyanathan, D. (2007). Teaching of mathematics. Chennai: Tamil Nadu Text Book Society.
- Ediger, M. & Rao, D. B. (2000). Teaching Mathematics Successfully. New Delhi: Discovery Publishing House.
- James, A. (2005). Teaching of Mathematics. New Delhi: Neelkamal Publications, 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.
- Kilpatrick, W. H. (1918). The project method. Teachers College Record, 19, 319-335.
- Kulshreshtha, A. K. (2008). Teaching of Mathematics. Meerut: R.Lall Books Depot
- Kumar, S. & Ratnalikar, D.N. (2003). Teaching of Mathematics. New Delhi: Anmol Publications Pvt. Ltd.
- 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.
- 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.
- Siddiqui, M. H. (2007). Teaching of Mathematics. New Delhi: APH Publishing Corporation.
- Soman, K. Ganitha sashtra bodhanam. Thiruvananthapuram: Kerala Bhasha Institute.
- 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.

EDU 05.7: PEDAGOGIC CONTENT KNOWLEDGE ANALYSIS: MATEMATICS

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

Objectives:

- To develop practical field based skill and experience in resource development and learning experience designing while transacting the mathematics curriculum
- To infuse an attitude for undertaking the contextual challenges as a Mathematics Education Professional
- To enrich the capabilities of Mathematics teachers during and after the pre service education
- To inculcate the theoretical and practical wisdom of mathematics classroom and its associated units' design, management and innovation

Contents:

Unit 1: Introduction to Pedagogic Content Knowledge

Unit 2: Planning and Designing of Lesson Templates

Unit 3: Essential Requirements of Teaching Mathematics

Unit 4: Resources in Teaching and Learning Mathematics

Unit I: Introduction to Pedagogic Content Knowledge (10 hours)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To provide knowledge on Pedagogic Analysis 2. To identify the requirements for Pedagogic Analysis 3. To develop ability to analyze the content for locating Objectives, Curricular objectives, learning outcomes, pre-requisites, resources, teaching strategies,	<ul style="list-style-type: none"> • Concepts and principles of pedagogic Analysis • Content Analysis of Standard 8,9 & 10 texts Books listing of Objectives, Curricular objectives, learning outcomes , pre-requisites, resources, teaching strategies, learning activities and judgment strategies 	Lecturing Collaborative/Cooperative Learning session Group discussion Seminars Narrative Expression	<ul style="list-style-type: none"> • Performance analysis in group discussions • _ Observation • _ Participation in the Seminar sessions • _ Assessment of assignment

learning activities and evaluation strategies		Assignment	
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Unit II: Planning and Designing of Lesson Templates (25 hours)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To understand need, importance and stages of planning instructions in mathematics 2. To develop the ability to plan and design year, unit and lesson plans	<ul style="list-style-type: none"> • Planning instruction • Need and Importance of planning, • Stages of planning • -Year plan, Unit plan and Lesson plan • Transition of behaviouristic approach to constructivist approach in lesson planning • Preparation of lesson templates in Behaviourist and Constructivist formats 	Meaningful verbal Presentation Collaboration/Cooperative Learning session, Group discussion Reviewing previous lesson plans	<ul style="list-style-type: none"> • _ Questioning • _ Performance analysis in group discussions • Assessment of practical records on Discussion, demonstration, criticism lessons. • Practicals • Discussion lessons • Observation of video lessons • o Demonstration lessons

Unit III: Essential Requirements for Teaching Mathematics(15 hours)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To understand the basic skills needed for effective teaching o develop the ability to make use of teaching skills by the practice of microteaching	<ul style="list-style-type: none"> • Mathematical Skills • Arithmetic skills:role of speed and accuracy • Geometric Skills • Drawing and interpreting graphs and charts • HOT skills • Teaching Skills 	Meaningful verbal presentation Group discussion	<ul style="list-style-type: none"> • Assessment of reflective diary • Performance analysis while practising Microteaching skill • discussions • Observation • Practicals

<p>2. To understand and practice digital skills.</p>	<ul style="list-style-type: none"> • Microteaching Skills (set induction, questioning, reinforcement, stimulus variation, using black board, explanation etc) • Microteaching lessons- Planning and preparation of <ul style="list-style-type: none"> ○ Microteaching lesson plans <ul style="list-style-type: none"> _ Practicing Microteaching skills • Digital skills <ul style="list-style-type: none"> -identify and practice digital skills for teaching 	<p>Brain storming</p> <p>Illustration of skills</p> <p>Simulation</p> <p>Video clippings/video lessons</p>	<ul style="list-style-type: none"> • Practice of skills
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Unit IV: Resources in Teaching and Learning Mathematics (10 hours)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
<ol style="list-style-type: none"> 1. To understand different methods for concretizing abstract ideas 2. To understand the need, importance and different types of learning aids in mathematics 3. To provide hands on experience on modern learning supporting gadgets for each student 	<ul style="list-style-type: none"> • concretization of abstract ideas in mathematics, • Different types of learning aids, • Improvised aids • modern learning supporting gadgets like PPT, Interactive white Board etc • Hands on experience on the modern learning supporting gadgets. 	<p>Meaningful verbal presentation</p> <p>Group activities</p> <p>Sessions in small or medium groups</p> <p>-Video clippings</p> <p>You tube resource tapping</p> <p>Drill and Practice</p> <p>Lab sessions</p>	<ul style="list-style-type: none"> • _ Performance analysis in individual and in group • discussions/tasks • _ Questioning • _ Practical tests

References :

- Aggarwal, J.C. (2001). Principles, Methods & Techniques of Teaching (2nd ed.). New Delhi: Vikas Publishing House Pvt. Ltd.
- Dash, B.N. (2005). Psychology of Teaching Learning Process, New Delhi: Dominant Publishers and Distributors.
- Ediger, M. & Rao, D. B. (2000). Teaching Mathematics Successfully. New Delhi: Discovery Publishing House.
- Gardner, H. (1983) Frames of Mind: The Theory of Multiple Intelligences. New York: Basic Books.
- James, A. (2005). Teaching of Mathematics. New Delhi: Neelkamal Publications, 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
- Kumar, S. & Ratnalikar, D.N. (2003). Teaching of Mathematics. New Delhi: Anmol Publications Pvt. Ltd..
- Malhotra, V. (2006). Methods of Teaching Mathematics, New Delhi: Crescent Publishing Corporation.
- Mustafa, M. (2005). Teaching of Mathematics. New Delhi: Deep and Deep Publications Pvt. Ltd
- 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.
- Siddiqui, M. H. (2007). Teaching of Mathematics. New Delhi: APH Publishing Corporation.
- 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.
- Mangal, S.K. Teaching of Mathematics. Ludhiana: Prakash Brothers Educational Publishers.
- NCERT (2006). National Curriculum Framework for School Education 2005. New Delhi.
- NCERT. A Text Book of content – cum – methodology of Teaching Mathematics, New Delhi: NCERT.
- Soman, K. Ganitha sashtra bodhanam. Thiruvananthapuram: Kerala Bhasha Institute.

EDU- 04.8 : THEORETICAL BASE OF PHYSICAL SCIENCE EDUCATION

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

Objectives:

- To make the novice student teachers understand the scope and nature of Physical Science teaching at different levels of learning
- To introduce the challenging career of Science teacher with a futuristic perspective as an agent of social change
- To acquire the fundamentals of theory and practice of principles and procedures of teaching and learning of Physical Science
- To develop an understanding of different methods, strategies and techniques possible in teaching and learning of Physical Science

Contents:

- **Unit 1:** Introduction to Teaching and learning
- Unit 2: Nature and Development of Science Education
- Unit 3: Aims and Objectives of Teaching Physical Science
- Unit 4: Methods and Strategies in Physical science Teaching

Unit I: Introduction to Teaching and Learning (10+5=15 hours)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To acquaint student teachers with the process of teaching learning in the changing scenario 2. To familiarize with the maxims of teaching 3. To understand the concept of learning given by behaviourists, cognitivists and constructivists 4. To familiarize with the changing classroom environment 5. To develop understanding in Continuing Professional	<ul style="list-style-type: none"> • Teaching - phases, maxims of teaching. • Learning - definitions based on behaviourism, cognitivism and constructivism. • Interdependence of teaching and learning. • Basic teaching model of Glaser. • Changing concept of classroom environment. • Science teacher - qualities, duties and responsibilities. • Multiple roles of teacher - Teacher as a leader, knowledge worker, facilitator, supervisor, mentor, scaffolder, social 	Meaningful verbal expression Group discussion Narrative expression sessions in small or medium groups Seminar	<ul style="list-style-type: none"> • Analysis in group discussion • Participant observation • Debate • Reflective journal • Tests

Development 6. To acquaint with the qualities, duties and responsibilities of science teacher 7. To understand the changing roles of teacher in the present scenario	engineer and reflective practitioner. • Professional growth of science teacher Continuing Professional Development (CPD)	Video streaming	
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Unit 2: Nature and Development of Science Education (10+5=15 hours)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To understand the nature and scope of science 2. To familiarize with the evolution of scientific achievements. 3. To identify and highlight the contributions of scientists in India and abroad 4. To appreciate the contributions given by the Indian women scientists 5. To familiarize with the evolution of teaching of science 6. To identify the role of science for sustainable development	<ul style="list-style-type: none"> • Nature of science-science as a product , process) • Scope of science-Values (intellectual, social, practical, disciplinary, recreational, moral, aesthetic) • Development of science in ancient, medieval and modern periods. • Contributions of scientists- Einstein, Newton, Lavosier, Mendeleev, Rutherford, C.V. Raman, M.N. Saha. P.C.Ray, APJ Abdul Kalam, G. Madhavan nair, ECG Sudarshan, Kalpana Chawla, Sunitha Williams, Tessy Thomas • Evolution of science education • Emerging branches in science- Nanotechnology, Bioinformatics, information Technology, Geoinformatics • Science for sustainable development 	Group discussion Seminar Personality profile presentation Creative blog	<ul style="list-style-type: none"> • Document analysis • Posters • Online assessment • Quiz programme

Unit 3: Aims and Objectives of Teaching Physical Science (20+4=24 hours)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To acquaint with the aims and objectives of teaching physical science 2. To understand the different taxonomies of instructional objectives 3. To understand the aims and objectives of NCF and KCF	<ul style="list-style-type: none"> • Aims and Objectives of teaching physical science • Scientific attitude • Objective based instruction- Instructional objectives, Specific objectives, learning experience, Evaluation • Taxonomy: Bloom's Taxonomy, 1956. • Revised Bloom's Taxonomy (Anderson and Krawthwohl), 1990. • Mc Cormack and Yager Taxonomy of Science Education, 1989 - Process skills. • Technology Integrated Taxonomy, Peck and Wilson, 1999. • Aims and Objectives of teaching Physical science with respect to NCF(2005), KCF(2007) 	Meaningful verbal expression Narrative expression sessions in small or medium groups Seminar Digital presentation Blog searching Reflective practices Peer tutoring	<ul style="list-style-type: none"> • Questioning • Participation in group discussions • Participant observation • Tests • Blog posting

Unit 4: Methods and Strategies in Physical science Teaching (20+6=26 hours)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To understand methods, strategies and techniques of teaching Physical Science	<ul style="list-style-type: none"> • Teacher centred methods- Lecture method, Lecture demonstration method, Historical method. • Learner centred methods- Laboratory method, assignment method, Heuristic method, Developmental method, Project method, Dalton Plan, Inductive method, Deductive method, Problem Solving method, Guided discovery method, Supervised Study • Scientific Method- Steps, Elements- Logical and Technical aspects, Mill's Canon of Induction, Transfer of training • Techniques of teaching Physical Science- Debate, Seminar, Symposium, Discussion, Buzz section, Brain storming, Simulation, Role play. 	<p>Meaningful verbal expression</p> <p>Group discussion</p> <p>Peer instruction</p> <p>Brain storming</p> <p>Explicit teaching</p>	<ul style="list-style-type: none"> • Analysis in group discussion. • Participant observation. • MCQ based discussion. • Graphic Organizer Designing.

Reference

- Aggarwal, J. C. (1997). Essentials of Educational Technology: Teaching Learning Innovations in Education. Vikas Publishing House. Pvt. Ltd.: New Delhi.
- Anderson, L. W., & Krathwohl, D. R. (Eds.). (2000). A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives. New York: Longman.
- Bloom, Benjamin Samuel. (1956). Taxonomy of Educational Objectives: The Classification of Educational Goals (Vol.1): Green, Longman.
- Ediger, M. & Rao, D. (2003). Teaching Science in Elementary Schools. Discovery Publishing House: New Delhi.
- Helaine Selin(1997): Encyclopedia of the History of Science, Technology and Medicine in Non-Western Culture: The Netherlands, Kluwer Academic Publishers.
- Jarvis, P. J. Holford & C. Griffin. (2001). The Theory and Practice of Learning. Kogan Page: London.
- Kandi Jaya Sree & Digumarti Bhaskara Rao (2004): Methods of Teaching Science: Discovery Publishing House. : New Delhi
- Krishna Kumar (2005): National Curriculum Framework, NCERT , MHRD, Govt. of India. : New Delhi

- Mangal S.K. & Uma Mangal (2009): Essentials of Educational Technology: New Delhi, PHI Learning Pvt Ltd.
- Mariamma Mathew (2014): Teaching science for biological and physical sciences: NAS Publishers: Kerala
- Olson, David & Torrance, Nancy (1996). The Handbook of Education and Human Development: Oxford, Blackwell Publishers.
- Parthasarathy R. (2000): Paths of Innovators In Science, Engineering and Technology, East West Books Pvt. Ltd. Editors, ERNET (2007): The Torch Bearers of Indian Renaissance: Bangalore, Indian Institute of Science. : Chennai
- Radha Mohan (2007): Innovative Science Teaching. Prentice Hall of India Pvt. Ltd. : New Delhi
- Tony Liversidge, Matt Cochrane, Bernard Kerfoot & Judith Thomas (2009). Teaching Science . Sage Publications India Pvt Ltd. : New Delhi.

EDU - 05.8 : PEDAGOGIC CONTENT KNOWLEDGE ANALYSIS : PHYSICAL SCIENCE

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

Objectives:

- To develop practical field based skill and experience in resource development and learning experience designing while transacting the science curriculum
- To infuse an attitude for undertaking the contextual challenges as a Science Education Professional
- To enrich the capabilities of prospective science teachers during and after the pre service education
- To inculcate the theoretical and practical wisdom of science classroom and its associated units' design, management and innovation

Contents:

- **Unit 1: Introduction to Pedagogic Content Knowledge**
- **Unit 2: Planning and Designing of Lesson Templates**
- **Unit 3: Essential Requirements of Teaching Physical Science**
- **Unit 4: Resources in Teaching and Learning of Physical science**

Unit 1: Introduction to Pedagogic Content Knowledge (20+10=30 hours)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To understand pedagogic content knowledge (PCK) and find its scope in teaching and learning 2. To understand the steps involved in PCK analysis 3. To apply the principles of pedagogic analysis.	<ul style="list-style-type: none"> • Pedagogic Content Knowledge (PCK)- Meaning and Scope. • Content analysis- Meaning, Purpose and steps. • PCK Analysis - Content Analysis, Learning outcomes, Pre requisites, Inputs that enrich learning (Teaching-learning resources, Environmental inputs), Community resources, Enrichment Activities, Assessment techniques, Assignments. 	Meaningful verbal expression Group discussion Turn around K-W-L charting Document writing	<ul style="list-style-type: none"> • Analysis in group discussion • Assessment of optional notebook entries • Open forum • Peer evaluation

	<ul style="list-style-type: none"> PCK Analysis of Physical science content from secondary school syllabus prescribed by SCERT 	Net surfing	
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Unit 2: Planning and Designing of Lesson Templates (20+15=35 hours)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To acquaint with the planning of instruction 2. To develop understanding of different types of planning 3. To design lesson templates based on different formats	<ul style="list-style-type: none"> Planning- Need and Importance. Different types of planning- Purposes and steps-Year Plan, Unit Plan, Resource Unit, Lesson Plan- Herbartian steps Behaviourist and Constructivist formats 	Meaningful verbal expression Group discussion Explicit teaching Peer tutoring	<ul style="list-style-type: none"> Performance assessment in group discussion Assessment of optional notebook entries

Unit 3: Essential Requirements of Teaching Physical Science (25+25=50 hours)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To identify competencies required for a teacher to be professional. 2. To develop understanding of various teaching skills 3. To understand microteaching and its relevance in the development of teaching skills 4. To design, practice and document micro lessons in physical science	<ul style="list-style-type: none"> Teacher Competencies-Subject competencies, Pedagogical competencies, Technological competencies. Teaching skills Microteaching - Definitions and meaning, principles, steps, microteaching cycle Development of selected teaching skills- Set induction, Reinforcement, Explaining, Illustrating with examples, Probing questions, Using chalk board, Stimulus 	Meaningful verbal expression Group discussion Document analysis and Peer evaluation Video observation Reflective practices	<ul style="list-style-type: none"> Analysis in group discussion Lesson segment preparation Observation schedule designing Think, Pair and Share sessions

	variation, Using audio-visual aids, discussion, promoting pupil participation, Classroom management.		
	• Link Practice		

Unit 4: Resources in Teaching and Learning of Physical science (15+10=35 hours)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To understand the importance of learning aids and improvised aids in learning Physical Science 2. To acquire hands-on experience in designing and developing suitable learning aids for classroom instruction 3. To develop understanding in resource mapping	<ul style="list-style-type: none"> • Learning aids and improvised aids- Importance in science learning • Text book- Qualities, Vogel's Criteria, Fog Index • Hand book, Source book, Work book, Reference book, Supplementary reading materials • Resource Mapping 	Narrative expression sessions in small or medium groups Document analysis You tube resource tapping Drill and Practice Lab sessions	<ul style="list-style-type: none"> • Participant observation • Analysis in group discussion • Class test • Material Development Circles

Reference

- Julie Gess- Newsome & Norman G. Lederman(1999): Examining Pedagogical Content Knowledge: Netherlands, Kluwer Academic Publishers.
- Mishra R. C. (2008): Lesson Planning: New Delhi, A P H Publishing Corporation.
- 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 Pvt. Ltd.
- Y K Singh & Archnesh Sharma(2004): Micro Teaching: New Delhi, A P H Publishing Corporation.
- MangalS.K.&UmaMangal(2009):Essentials of Educational Technology:New Delhi,PHILearning PvtLtd.
- Alan J. McCormack. Trends and Issues in Science curriculum in Science Curriculum
- Resource Handbook: A practical guide to k12 science curriculum. Kraus International Publications
- Black, P (1998). Testing: Friend or Foe? Theory and practice of Assessment and Testing. Falmer Press, London.
- Carey, S. (1986). Cognitive Science and Science Education. American Psychologist. 41 (10), 1123- 1130
- Chalmers, A. (1999). What is the thing called Science.3rd Ed. Open University Press, Bucking ham.
- Driver. R, Leach. J, Millar. R and Scott, P. (1996). Young Peoples' Image of Science. Open University Press, Buckingham.

EDU – 04.9 : THEORETICAL BASE OF NATURAL SCIENCE EDUCATION

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

OBJECTIVES:

Enable the student teacher to

- understand the scope and nature of Natural Science Teaching at different levels of learning.
- acquire the fundamentals of theory and practice of principles and procedures of Teaching and Learning of Natural Science.
- understand the concept of teaching- learning process.
- identify roles and competencies essential for a Natural science teacher.
- understand and develop skill in selecting appropriate aims and objectives for teaching Natural Science.
- familiarize and apply the instructional management strategies of teaching Natural Science.

CONTENTS

- Unit – I :** **General introduction to teaching and learning for novice** -Concept of Teaching and Learning- Its interdependence. Changing concept of classroom environment, Teacher as a professional
- Unit – II :** **Science –a conceptual analysis -The nature and development of science.**
- Unit – III :** **Aims and objectives of teaching Natural Science** -Broad aims of teaching Natural Science ,Aims and objectives of teaching Natural science with respect to NCF and KCF and different Taxonomies of Instructional Objectives-
- Unit – IV :** **Methods and strategies for teaching Natural Science**-Teacher and Student initiated methods, Approaches, Techniques.

UNIT: I GENERAL INTRODUCTION TO TEACHING AND LEARNING FOR NOVICE (Theory hours-10)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To understand classroom as an organization 2. To acquaint student teachers with the process of teaching learning in the changing scenario.	1.1Classroom as an organization -Teacher and Learner, Definitions of learning from different point of view (behavioristic, cognitive and constructivist), <ul style="list-style-type: none"> • Teaching-Learning process. Maxims of teaching. 	Group discussion. Narrative expression sessions in small or medium groups.	<ul style="list-style-type: none"> • Participation in group discussion. • Questioning. • On-task behavior in class. • Tests.

<p>3. To understand the concept of learning according to behaviouristic, cognitive and constructivist theories.</p> <p>4. To understand the changing concept of classroom environment in 21st century.</p> <p>5. To familiarize the maxims of teaching.</p> <p>6. To familiarize the virtual learning environment.</p> <p>7. To identify the qualities and competencies required for a science teacher.</p> <p>8. To understand the changing roles of teacher in teaching-learning process.</p> <p>9. To familiarize the concept of Continuing professional development.</p>	<ul style="list-style-type: none"> ○ Changing concept of classroom environment- classroom climate- An introduction to conducive, learner friendly, inclusive and Virtual learning environment (VLE). ○ Teacher as a professional <ul style="list-style-type: none"> ▪ Teacher qualities, competencies ▪ Role of Teacher as manager, leader, knowledge worker, guide, supervisor, mentor, scaffolder, social engineer, reflective practitioner in teaching-learning process. ▪ Continuing professional development (CPD)- conceptual Analysis. • 1.4 An introduction to Child With Special Needs (CWSN). 	<p>Brain storming.</p> <p>Seminar.</p> <p>Reflective practices.</p> <p>Debate.</p> <p>PBL.</p> <p>Multimedia approach.</p>	<ul style="list-style-type: none"> • Science diary. • Daily reflective journal • Participant observation
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UNIT.II SCIENCE –A CONCEPTUAL ANALYSIS NATURE AND DEVELOPMENT(Theory hours-8)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
<p>1. To understand the nature of science.</p> <p>2. To familiarize and appreciate the development of science in India and Contributions of scientists in India and abroad.</p>	<ul style="list-style-type: none"> • 2.1 Nature of science-The three fold nature of science- Science as process (Scientific method, Process skills) and products (Terms, Facts, Concepts, Principles, Process, Theories, Laws, and Generalizations). Scientific attitude. ○ Development of science education in India. <ul style="list-style-type: none"> ▪ An introduction to National Scientific Policy 	<p>Group discussion</p> <p>Seminar</p> <p>Personality</p>	<ul style="list-style-type: none"> • Online assessment • Participation in group discussion. • Questioning. • On-task behavior. • student's portfolio. • Posters

<p>3. To familiarize the development of science in India.</p> <p>4. To design different strategies to develop scientific Attitude.</p> <p>5. To familiarize the emerging branches of Science</p>	<p>Resolution of 1958, Indian Parliamentary and Scientific Committee & Role of NCERT in science education.</p> <ul style="list-style-type: none"> ▪ Path breaking discoveries of Loius Pasteur, HarGobindKhorana, CharlesDarwin, M.S.Swaminathan, and Gregor Johhan Mendal. ▪ An introduction to Emerging branches of science: Biotechnology, Nanotechnology, Bioinformatics, Geo informatics. 	<p>profile presentation</p> <p>Reflective practices.</p> <p>PBL</p> <p>Multimedia and interdisciplinary approach.</p> <p>Team teaching.</p> <p>Peer tutoring</p>	
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UNIT-III AIMS AND OBJECTIVES OF TEACHING NATURAL SCIENCE (Theory hours-21)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
<p>1. To identify the values of science and its transactional potentiality.</p> <p>2. To understand the aims and objectives of teaching Natural Science.</p> <p>3. To understand the aims and objectives of NCF and KCF.</p> <p>4. To understand the different taxonomy of instructional objectives.</p>	<ul style="list-style-type: none"> • 3.1Broad aims of teaching Natural Science :Awareness about the millennium development goals with special reference todeveloping scientific literacy(Practical, Civic and Cultural), • Effecting social changes(promoting health and hygiene, Population control, • Eradication of diseases, • Better nutrition(Eradicate extreme poverty & hunger), 	<p>Meaningful verbal expression.</p> <p>Group discussion.</p> <p>Narrative expression sessions in small or medium groups.</p> <p>Brain storming.</p>	<ul style="list-style-type: none"> • Participation in group discussion. • Questioning. • On-task behavior in class. • Tests. • Science dairy. • Daily reflective journal • Participant observation. • Student's portfolio

<p>5. To understand the concept of Objective based Instruction.</p> <p>6. To understand triangular relationship between the instructional objectives, Learning experiences and evaluation.</p>	<ul style="list-style-type: none"> • Removal of superstitions, Raising the standard of living : bringing science to home and community (longevity of life, decreasing infant mortality rate, • Improve maternal health, health index, better living conditions, role and functioning of community health centers), • Self-sufficiency in food, • Modern agricultural practices- Agricultural management, • Modern techniques of cultivation, Conservation of natural resources, • Environmental awareness and Ensure environmental sustainability. ○ 3.2. An introduction to aims & Objectives of teaching Natural Science with respect to NCF and KCF. <ul style="list-style-type: none"> ▪ Relevant sections of NCF-Section 3.3 Science- basic criteria of validity of a science curriculum, Section 3.3.1 The curriculum at different stages. Section 3.3.2 Outlook. ▪ Relevant sections of KCF-Section 5.2.2 & Section 5.2.4 aims of science education. • 3.3Taxonomy of Instructional Objectives- Origin, Bloom’s Taxonomy of Instructional Objectives (1956) , Classification by NCERT, Mc Cormack and Yagar’s classification,Technology Integrated Taxonomy –Peck & Wilson (1999) , Revised Blooms Taxonomy by Anderson and Krathwohl (2001). ○ Objective based Instruction. 	<p>Seminar.</p> <p>Reflective practices.</p> <p>PBL.</p> <p>Multimedia and inter-disciplinary approach.</p> <p>Team teaching.</p> <p>Peer tutoring</p>	
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UNIT IV METHODS AND STRATEGIES FOR TEACHING NATURAL SCIENCE (Theory hours-21)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
<p>1. To understand appropriate methods, techniques and strategies of teaching Natural science.</p> <p>2. To develop skill in selecting appropriate methods, techniques and strategies of teaching Natural science.</p>	<ul style="list-style-type: none"> ○ Teacher initiated methods- Lecture method, Lecture cum Demonstration and Biographical method. ○ Student initiated methods- Problem solving, Project method, Guided discovery, Experimental and heuristic method. ● Approaches- Inductive-Deductive, Multimedia, Interdisciplinary and Constructivist approaches. ○ Techniques- Seminar, Group discussion, Debate, Brain storming, peer tutoring, team teaching, concept mapping. 	<p>Meaningful verbal expression Group discussion</p> <p>Peer instruction</p> <p>Narrative expression sessions.</p> <p>Brain storming.</p> <p>Seminar.</p> <p>Reflective practices.</p> <p>PBL.</p> <p>Modular approach.</p> <p>Multimedia and interdisciplinary approach.</p> <p>Peer tutoring</p>	<ul style="list-style-type: none"> ● Participation in group discussion. ● Questioning. ● On-task behavior in class. ● Tests. ● Science diary. ● Daily reflective journal ● Participant observation.

SUGGESTED REFERENCES

- Blooms, B.S. (Ed.), Taxonomy of Educational Objectives: The Classification of Educational Goals, Handbook I: Cognitive Domain, McKay, New York, 1956.
- De Boer, G.E., Scientific Literacy : Another Look at its Historical and Contemporary Meanings and its Relationship to Science Education Reforms , Journal of Research in Science Teaching, 37(6), pp.582-601' 2000.
- Good, C.V. (Ed.),Dictionary of Education, McGraw-Hill, New York,1959.

- Norman herr(2007)The Sourcebook for Teaching Science – Strategies, Activities, and Instructional Resources, ISBN 978-07879-72981 [or 07879-72983] San Francisco,CA John Wiley/Jossey- Bass publishers.
- Government of India, Report of Science Teaching in Secondary Schools, Committee on Plan Projects, New Delhi, 1964.Hodson, D. and D.J. Reid, Science for All Motives, Meaning and Implications, School Science Review, pp. 653-661, 1988.
- Joyce, Bruce, and Weil, Marsha,(1997). Models of Teaching (5thEdn.) New Delhi: Prentice Hall of India.
- Sharma ,R.C. Modern Science Teaching, DhanpatRai and Sons, Delhi.
- Radhamohan, Innovative Science Teaching for Physical Science, Prentice Hall, New Delhi,2002.
- Das.R.C., Science Teaching in Schools, Sterling Publishers, New Delhi.
- Aggarwal, J.C.,(2003). Principles, Methods and techniques of Teaching, New Delhi: Vikas Publications.
- Nanda, V.K.(Ed.),Modern Techniques of Teaching (5 Vols.).New Delhi:Anmol Publications.
- Anderson, W. Lorin., and Krathwohl,David. R., A Revision of Bloom’s Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom’s Taxonomy of Educatioal Objectives Complete (Edn.)
- Mangal, S.K., A Text Book of Teaching Life Science,.
- Mangal, S.K., and Mangal, Uma., Educational Technology.
- Krathwohl, D.R., B.S.Bloom, and B.B.Maria, Taxonomy of Educational Objectives, Hand Luhmann Book II: Affective Domain, Mckay, New York, 1964.
- 33.NCF-2005, NCERT, New Delhi.
- NCERT, Government of India, National Curriculum Framework(NCF),2000, New Delhi, 2000.
- NCERT, Government of India, National Curriculum Framework(NCF),2005, New Delhi, 2005.
- Yager, R.E., The Constructivist Learning Model: Toward Real Reform in Science Education, The Science Teacher,1991.
- Ahmad, Jasim.,(2009) Teaching of Biological Sciences, PHI Learning Private Limited, New Delhi.
- Enger,D.Eldon, Ross.C,Frederick and Bailey, B.David.,McGraw-Hill Publication, New York.
- Anderson,R.C., et al.,(Eds) Current Research in Instruction, Prentice Hall.
- Bhattacharya S. P. (1994): Models of Teaching: New Delhi, Regency Publications.
- David Olson & Nancy Torrance(1996): The Handbook of Education and Human Development: Oxford, Blackwell Publishers
- HelaineSelin(1997): Encyclopedia of the History of Science, Technology and Medicine in Non-Western Culture: The Netherlands, Kluwer Academic Publishers.
- Kandi Jaya Sree&DigumartiBhaskaraRao (2004): Methods of Teaching Science: New Delhi, Discovery Publishing House.
- Krishna Kumar (2005): National Curriculum Framework: New Delhi, NCERT , MHRD, Govt. of India.
- Parthasarathy R. (2000): Paths of Innovators In Science, Engineering and Technology: Chennai, East West Books Pvt. Ltd. Editors, ERNET (2007): The Torch Bearers of Indian Renaissance: Bangalore, Indian Institute of Science.
- Radha Mohan(2007): Innovative Science Teaching: New Delhi, Prentice Hall of India Pvt. Ltd.
- Tony Liversidge, Matt Cochrane, Bernard Kerfoot& Judith Thomas(2009). Teaching Science: New Delhi, Sage Publications India Pvt Ltd.

INTERNET REFERENCES

- <http://www.csun.edu/science/biology/index.htm>
- http://archive.org/stream/modernmethodsand029422mbp/modernmethodsand029422mbp_djvu.txt
- http://books.google.com/books/about/Modern_Methods_and_Mater...
- <http://www.amazon.com/Teaching-Secondary-School-Science-Stra...>
- http://www.ncert.nic.in/new_ncert/ncert/rightside/links/pdf/...
- http://www.ncert.nic.in/right_side/links/pdf/framework/english/nf2005.pdf
- http://www.ssamis.com/web/downloads/KCF%2020_07.pdf

EDU- 05.9: PEDAGOGIC CONTENT KNOWLEDGE ANALYSIS - NATURAL SCIENCE

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

OBJECTIVES :

Enable the student teachers to:

- comprehend the dimensions of pedagogical analysis.
- critically analyze the Secondary School Biology Syllabus based on pedagogical Content Knowledge.
- understand and apply the different skills for teaching Natural Science.
- understand and prepare teaching manuals based on different instructional strategies.
- understand the different teaching learning resources for teaching Natural Science.
- prepare and use suitable learning aids for Natural Science teaching.

CONTENTS

Unit I : **Pedagogic content knowledge and pedagogic analysis** of Secondary School Biology Syllabus

Unit II : **Types of planning** instruction, different approaches of designing lesson plans.

Unit III : **Teaching skills** and its development.

Unit IV : **Design and development of teaching learning resources** for enhancing science learning-visual, projected, non-projected and activity aids

UNIT I -PEDAGOGICAL ANALYSIS OF TEACHING NATURAL SCIENCE (Theory hours -15)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To generate a knowledge of terminologies and the interdependence of teaching and learning. 2. To familiarize and develop general and specific teacher competencies in analyzing content.	<ul style="list-style-type: none"> • 1.1.Pedagogic Content Knowledge (PCK) - Meaning, objectives, scope, principles and dimensions. • 1.2. Pedagogiccontent analysis of secondary school syllabus prescribed by SCERT. 	Meaningful verbal expression Group discussion Narrative expression sessions in small or medium groups	<ul style="list-style-type: none"> • Performance assessment in group discussion • Assessment of Optional Note Book entries • Questioning • Tests • Peer evaluation

3. To make Pedagogic content knowledge analysis of secondary school Biology syllabus.		Text Book analysis and peer instruction	<ul style="list-style-type: none"> • Student's portfolio
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UNIT II - INSTRUCTIONAL PLANNING FOR TEACHING NATURAL SCIENCE (Theory hours-20)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To understand different types of planning. 2. To develop skill in designing lesson plans based on different approaches.	<ul style="list-style-type: none"> ○ 2.1 Meaning and importance of planning, Types of planning – Year plan, Unit plan, lesson plan and Resource Unit • 2.2 Designing lesson plans based on Herbartian Approach & Constructivist Approach. 	Discussions in small or medium groups.. Seminar. Reflective practices. Debate. PBL.	<ul style="list-style-type: none"> • Performance assessment in group discussion • Questioning • Tests • Peer evaluation • Lesson Plan

UNIT III - TEACHING SKILLS AND ITS DEVELOPMENT:

SCIENCE TEACHING SKILLS/ ESSENTIAL REQUIREMENTS OF TEACHING NATURAL SCIENCE (Theory hours 15)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To understand the different types of teaching skills. 2. To develop the teaching skills relevant to Biological science.	<ul style="list-style-type: none"> ○ Teaching skills – Definition, Core teaching skills, Components of teaching skills, Teaching skills specially required for Biology teacher. 	Discussions in small or medium groups. Reflective practices.	<ul style="list-style-type: none"> • Performance assessment in group discussion • Assessment of performance in brain storming,

<ol style="list-style-type: none"> 3. To familiarize the different phases of micro teaching. 4. To develop skill in designing micro lessons. 5. To develop skill in practicing micro lesson. 	<ul style="list-style-type: none"> ○ Micro-teaching: Objectives, Micro-teaching cycle - its relevance in teacher training programme. ○ Importance of Link practice. ● 3.4 Design and development of micro lessons- practice and documentation with appraisal format to elicit feedback. 	<p>Multimedia and interdisciplinary approach.</p> <p>Team teaching.</p> <p>Peer tutoring</p> <p>Group discussion.</p> <p>Narrative expressions</p>	<ul style="list-style-type: none"> ● Symposium. ● Questioning ● Tests ● Peer evaluation ● Assessing micro lessons ● Assessing micro teaching.
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UNIT IV – RESOURCES IN TEACHING AND LEARNING OF NATURAL SCIENCE (Theory hours-10)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
<ol style="list-style-type: none"> 1. To understand the meaning and definition of audio-visual aids 2. To identify and comprehend the different types of audiovisual aids in teaching Natural Science. 3. To develop skill in improvisation. 4. To apply multimedia in teaching Natural Science. 	<ul style="list-style-type: none"> ● 4.1Design and development of materials for effective science learning ● 4.2Audiovisual aids ● Significance of audio visual aids in science learning. ▪ Designing, developing and documenting minimum of one item for - improvised, Visual and graphic aids (Charts, Models, 	<p>Discussions in small or medium groups.</p> <p>Seminar.</p> <p>Reflective practices.</p> <p>PBL.</p>	<ul style="list-style-type: none"> ● Performance assessment in group discussion, debate etc. ● Assessment of assignments ● Questioning. ● Tests ● Peer evaluation ● Student’s portfolio ● Evaluating the audio visual aids

<p>5. To design and develop the teaching learning aids for Natural Science.</p>	<p>Diagrams, Pictures, Posters).</p> <ul style="list-style-type: none"> ▪ Projected and non-projected aids-OHP, LCD, Bulletin Board, Flannel Board, Interactive Board etc. ▪ Activity aids -Aquarium, Terrarium, and Nature Calendar. • 4.3Collection and preservation of specimens. 	<p>Multimedia and interdisciplinary approach. Peer tutoring.</p>	<p>prepared by student teachers.</p>
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SUGGESTED REFERENCES

- Text books and hand books of High School Biology Syllabus prescribed by SCERT
- Julie Gess- Newsome & Norman G. Lederman(1999): Examining Pedagogical Content Knowledge: Netherlands, Kluwer Academic Publishers.
- Mishra R. C. (2008): Lesson Planning: New Delhi, A P H Publishing Corporation.
- RadhaMohan(2007): Innovative Science Teaching: New Delhi, Prentice Hall of India Pvt. Ltd.
- Mathew, T.K., and Molikutyy, T.M, (2006). Science Education- Theoretical Base of Teaching and Pedagogic Analysis, Rainbow Book Publishers, Kerala.
- Jessy Mathews., (2008). Teaching of Natural Science –Theory, Perspectives and Practices. Methodology of teaching life sciences.
- Sivarajan, K and Faziludeen .A(2008 6th edition) Science Education-Methodology of teaching and pedagogic analysis' Calicut university
- Benjamin Samuel Bloom (1956): Taxonomy of Educational Objectives: The Classification of Educational Goals (Vol.1): Green, Longman.
- Bhattacharya S. P. (1994): Models of Teaching: New Delhi, Regency Publications.
- Bruce R. Joyce, Marsha Weil and Emily Calhoun (2011): Models of Teaching (7th Ed.): USA, Pearson Education
- David Olson & Nancy Torrance(1996): The Handbook of Education and Human Development: Oxford, Blackwell Publishers
- Helaine Selin(1997): Encyclopedia of the History of Science, Technology and Medicine in Non-Western Culture: The Netherlands, Kluwer Academic Publishers.
- Kandi Jaya Sree & Digumarti Bhaskara Rao (2004): Methods of Teaching Science: New Delhi, Discovery Publishing House.
- Krishna Kumar (2005): National Curriculum Framework: New Delhi, NCERT , MHRD, Govt. of India.
- Radha Mohan, (2007). Innovative Science Teaching for Physical Science teachers(3rded) PHL learning, New Delhi.
- Jessy Mathews., (2008). Teaching of Natural Science –Theory, Perspectives and Practices. Methodology of teaching life sciences.

- NarenderaVaidhya, (2006).Science Teaching in School for the 21st Century ,deep and deep publications PVT, New Delhi.
- Mathew,T.K., and Molikutyy, T.M, (2006).Science Education- Theoretical Base of Teaching and Pedagogic Analysis, Rainbow Book Publishers,Kerala.
- Allen, D.W,(1996).Microteaching: A Description, Stanford University, School of Education, California.
- Hayward, Dave (2003). Teaching and Assessing Practice Skills in Science, Cambridge University Press, UK.
- Mathew, T.K., and Molikutyy, T.M, (2006).Science Education- Theoretical Base of Teaching and Pedagogic Analysis, Rainbow Book Publishers, Kerala.
- Kieffer, Q.E. and L.W. Cochran, Manual of Audio-Visual Aids , New Delhi: Prentice Hall of India, 1964.
- Pula, Fred John, Application and Operation of Audio-Visual Equipment in Education, London: John Wiley & Sons, 1968.
- Wyman, Raymond, Audio-Visual Devices and Techniques, Amherst: University of Massachusetts, 1957
- Ahluwalia,S.L., Audio Visual Hand Book, Delhi: NCERT, 1967.
- Mangal, S.K. and Mangal, Uma, Essentials of Educational Technology, New Delhi: PHI Learning Private Limited, 2009.
- **INTERNET REFERENCES**
- <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.91....>
- http://en.wikipedia.org/wiki/Technological_Pedagogical_Conte...
- <http://www.amazon.com/books/dp/0805863567>
- <http://ictevangelist.com/technological-pedagogical-and-conte>.
- <http://www.amazon.com/Lesson-Planning-Education-Books/b?ie=U..>

EDU – 04.10 – THEORETICAL BASE OF SOCIAL SCIENCE EDUCATION

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

Objectives:

- To familiarize with the conceptualized version of components required to enter in teaching profession
- To mould the prospective teacher educators to uphold the professional spirit
- To equip with varied dimensions of Social Science education
- To identify and analyse the aims and objectives of teaching Social Science
- To gain an outlook of approaches in behaviorism, constructivism and cognitivism in Social Science education
- To analyze the unique features of different instructional methods suited for teaching Social Science
- To identify and select most appropriate teaching- learning methods and strategies in varied context and content.

Contents:

Unit: 1 Introduction to Teaching and Learning

Unit: 2 Nature, Scope and Development of Social Science Education

Unit: 3 Aims and objectives of Teaching Social Science

Unit: 4 Instructional Methods, Techniques and strategies in Social Science Teaching

Unit : 1 Introduction to Teaching and Learning

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To familiarize with the conceptualized version of components required to enter in teaching profession	<ul style="list-style-type: none"> • Teaching - profession and service, Principles and Maxims of teaching, Instruction, Factors determine effective instruction, classroom Interactions, Learner, Learning, Learning environment, classroom as a social 	Meaningful verbal presentation Brain storming Case analysis of 2/3 famous teachers	<ul style="list-style-type: none"> • Report writing and verification • Case analysis presentation

<p>2. To mould the prospective teacher educators to uphold the professional spirit in diverse angles</p>	<p>laboratory.</p> <ul style="list-style-type: none"> Teacher, Teacher as professional; Continuing Professional Development (CPD), Qualities and competencies of Social Science Teachers, Teacher responsibilities; multifarious roles: knowledge worker, facilitator, scaffolder, mentor, social engineer, counselor, reflective practitioner and digital migrant. 	<p>Buzz session to generate varied roles of an ideal teacher</p>	
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References

- <http://www.wikihow.com/Be-a-Professional-Teacher>
- <http://www.edpolicythoughts.com>
- Kumar, S.P.K & Noushad,P.P.(2009). Social Studies in the Classroom: Trends and Methods.
- Kochhar, S.K. (2002). The Teaching of Social Studies.
- Aggarwal, J.C. (2003). Teaching of Social Studies: A Practical Approach.
- Ehman & Patrick (1974). Towards Effective Instruction in Social Studies. USA: Houghton Miffln.
- Dash, B. N.(1998). Content cum Methods of Teaching Social Studies. Ludhiana: Kalyani Publishers.
- Edigar, M. & Rao, B. (2003). Teaching Social Studies Successfully. New Delhi: Discovery Pub.House.
- Bining, A.C & Bining, D.H. (1952) Teaching Social Studies in Secondary Schools. New York: McGraw Hill

Unit: 2 Nature, Scope and Development of Social Science Education. (10 Hrs + 4 Hrs)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
<p>1. To acquaint with the basic concepts of Social Science as a discipline</p> <p>2. To identify subject matter</p>	<ul style="list-style-type: none"> Conceptual background of Social Science, Meaning and Scope, Need and significance Content organization treatment of Social Science- Fusion, Integration and Correlation within Social Science- Understanding about 	<p>Meaningful verbal learning</p> <p>Participatory approach</p>	<ul style="list-style-type: none"> Preparation of report on teacher Presentation

organization process in Social Science- Fusion, Integration & Correlation	Primary, Secondary and Higher Secondary levels (Social Studies, Social Science and Humanities)	Co- operative learning Discussion	
3. To analyze the relationship of Social Science with other subjects	<ul style="list-style-type: none"> Correlation of Social science with other subjects- Language & Science 		

References

- www.empoweringvision.org
- <http://serc.carleton.edu>
- <http://www.ecosensorium.org>
- Aggarwal, J.C. (1996) A Practical Approach. New Delhi : Vikas Publishing House Pvt. Ltd.
- Kumar, S.P.K & Noushad,P.P.(2009). Social Studies in the Classroom: Trends and Methods.
- Kochhar, S.K. (2002). The Teaching of Social Studies.
- Aggarwal, J.C. (2003). Teaching of Social Studies: A Practical Approach.
- Ehman & Patrick (1974). Towards Effective Instruction in Social Studies. USA: Houghton Miffln.
- Dash, B. N.(1998). Content cum Methods of Teaching Social Studies. Ludhiana: Kalyani Publishers.
- Edigar, M. & Rao, B. (2003).Teaching Social Studies Successfully. New Delhi: Discovery Pub. House.
- Bining, A.C & Bining, D.H. (1952) Teaching Social Studies in Secondary Schools. New York: McGraw HillPrimary, Secondary and Higher Secondary (Social Science) text books of SCERT and NCERT.

UNIT : 3 Aims and objectives of Teaching Social Science

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To identify and analyze the aims and objectives of teaching Social Science	<ul style="list-style-type: none"> Aims, objectives and values of teaching Social Science Individual, Social, Cultural, National and 	General discussion Analytical study	<ul style="list-style-type: none"> Comparison chart on Basic concepts of Behaviorism, constructivism and cognitivism

<p>2. To endow with the significance of Taxonomy of instructional objectives in Social Science education</p> <p>3. To gain an outlook of approaches in behaviorism, constructivism and cognitivism in Social Science education</p>	<p>International considerations of Social Science</p> <ul style="list-style-type: none"> • Bloom's taxonomy of Instructional objectives (Revised)- Instructional objectives and specifications. • Behaviorism, Cognitivism and Constructivism- approach & practice in classroom- Comparison • Learning objectives and Learning Outcomes 	<p>Focus group discussion</p> <p>Prepare a seminar paper with PPT support on the psychological implications in the pedagogical practices of Social Science.</p>	<p>and its analysis</p> <ul style="list-style-type: none"> • Seminar with Slide presentation (CE item for Edu. 04) • Test (CE Edu.4)
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References

- http://www.unco.edu/cetl/sir/stating_outcome/document
- <http://ci484-learning-technologies.wikispaces.com/Behavioris>.
- Chauhan, S.S (2006) Advanced Educational Psychology, New Delhi
- Mangal.S.K(2007) Human Development and Learning, Crow.L.D & Crow Alice(2008)
- Entwistle, N.J. (1987). Understanding Classroom Learning. London: John Wiley
- Freire, Paulo. (1998). Pedagogy of the Oppressed. USA: Continuum Pub. Co.
- Gardner, H. (1983). Frames of Mind: The Theory of Multiple Intelligences. New York: Basic Books
- Goleman, D. (1995). Emotional Intelligence. New York: McGraw Hill.
- Kincheloe, J. (2008). Critical Pedagogy (2nd Edn.) New York: Peter Lang.
- NCF(2005), KCF(2007)
- N.C.E.R.T. (1989). Instructional objectives of school subjects. New Delhi: N.C.E.R.T
- Bining, A.C & Bining, D.H. (1952) Teaching Social Studies in Secondary Schools. New York: McGraw Hill
- Clark, L.H.(1973). Teaching Social Studies in Secondary Schools.(2nd Ed.)New York:McMillan.
- Aggarwal, J.C. (2003). Teaching of Social Studies: A Practical Approach.
- Ehman & Patrick (1974). Towards Effective Instruction in Social Studies. USA: Houghton Mifflin.
- Dash, B. N.(1998). Content cum Methods of Teaching Social Studies. Ludhiana: Kalyani Publishers.
- Edigar, M. & Rao, B. (2003).Teaching Social Studies Successfully. New Delhi: Discovery Pub.House.
- Kumar, S.P.K & Noushad,P.P.(2009). Social Studies in the Classroom: Trends and Methods.

- Bloom, B. S. (1956). Taxonomy of Educational Objectives: Cognitive Domain. New York: David McKay Co.
- Gronlund, N.E. (1970) Stating Behavioural objectives for class room instruction. London: MacMillan
- Krathwohl, et al, Taxonomy of Educational Objectives, Hand Book II: Affective Domain. McKay: New York.
- Anderson, W.L and Krathwohl, D.R, A Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives. Allyn & Bacon: Boston.

UNIT 4: Instructional Methods, Techniques and Strategies

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To analyze the unique features of different instructional methods suited for teaching Social Science 2. To proficient in select most appropriate teaching methods in varied context and content.	<ul style="list-style-type: none"> • Need and significance of methods and strategies for teaching Social Science. • Differentiate method, technique and strategy • Methods- Lecture, storytelling, Discussion, Socialized recitation, Problem solving, Project, Source method, Supervised study. • Cooperative learning, Collaborative learning, Scaffolding, Brain storming, Buzz session, Debate, Seminar. 	Seminar Debate Project	<ul style="list-style-type: none"> • Report presentation & verification

References

- www.books.google.co.in
- www.flipkart.com
- <http://www.celt.iastate.edu/creativity/techniques.html>
- Aggarwal, J.C. (1996) A Practical Approach. New Delhi : Vikas Publishing House Pvt. Ltd.
- Alexey Semenov, UNESCO, (2005): Information and Communication Technologies in Schools: A Handbook for Teachers.
- Kumar, S.P.K & Noushad, P.P. (2009). Social Studies in the Classroom: Trends and Methods.
- Roblyer, M.D. (2008). Integrating educational technology into teaching. New Delhi: Pearson.
- Fitchman & Silva (2003). The Reflective Educators' Guide to Classroom Research. California: Corwin Press, Inc.

- Dash, B. N.(1998). Content cum Methods of Teaching Social Studies. Ludhiana: Kalyani Publishers.
- Ehman & Patrick (1974). Towards Effective Instruction in Social Studies. USA: Houghton Mifflin.
- Edigar, M. & Rao, B. (2003). Teaching Social Studies Successfully. New Delhi: Discovery Pub. House.
- Atkins N.J and Atkins J.N, Practical Guide to Audio Visual Technique in Education
- Hoole H.S. Ratnajeewan & Hoole Dushyanthi. (2005). Information and communication technology. New Delhi: Foundation Books PVT. LTD.
- Entwistle,N.J.(1981). Style of learning and teaching. London: John Wiley & Sons Fosnot,C.(1996).Constructivism: theory,perspectives and practice.Newyork:Teachers College Press

EDU – 05 .10 : PEDAGOGIC CONTENT KNOWLEDGE ANALYSIS – SOCIAL SCIENCE.

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

Objectives

- To understand the key aspects involved in systematic PCK analysis
- To develop skill in analyzing the content of secondary level Social Science text book
- To justify the importance and phases of instructional planning in Social Science
- To equip prospective teacher educands in developing teaching skills through micro teaching practices
- To conscientize the inevitable role of various instructional support in effective instructional practices.
- To become competent in developing suitable testing mechanisms.

Contents

- Unit 1** Introduction to Pedagogical content knowledge analysis
Unit 2 Instructional Planning and Designing Lesson Templates
Unit 3 Essential Requirements for Teaching Social Science Education
Unit 4 Instructional Resources in Teaching and Learning of Social Science

Unit : 1 Nature and Scope of Pedagogical content knowledge analysis

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To understand the key aspects involved in systematic PCK analysis 2. To establish relationship between pedagogic knowledge with content analysis	<ul style="list-style-type: none"> • Pedagogical content knowledge analysis (PCK) -Meaning, Scope, Features of PCK analysis, significance of PCK analysis in Social Science. • Relationship between pedagogic analysis with content analysis Content Analysis – 	Narrative expression session Text book analysis Collaborative learning Discussion- Prepare	<ul style="list-style-type: none"> • Content analysis presentation • Brief report on text book analysis

3. To develop skill in analyzing the content of secondary level Social Science text books	Procedure, facts, concepts, principles. <ul style="list-style-type: none"> • Content analysis of secondary Social Science text books-(History, Geography, Political Science, Economics, Sociology areas) 	content analysis of two units by each student teacher after discussion.	
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References

- <http://www.csun.edu/science/ref/pedagogy/pck/>
- http://en.wikipedia.org/wiki/Technological_Pedagogical
- Aggarwal, J.C. (1996) A Practical Approach. New Delhi : Vikas Publishing House Pvt. Ltd.
- Kumar, S.P.K & Noushad,P.P.(2009). Social Studies in the Classroom: Trends and Methods.
- Kochhar, S.K. (2002). The Teaching of Social Studies. New Delhi: Sterling.
- Dash, B. N.(1998). Content cum Methods of Teaching Social Studies. Ludhiana: Kalyani Publishers.
- Pathak R.P.(2012).Teaching of social studies. Pearson, Delhi
- Edigar, M. & Rao, B. (2003).Teaching Social Studies Successfully. New Delhi: Discovery Pub.House
- Social Science text book of standard 8,9 & 10 of Kerala
- Teachers' Hand book in Social Science for standard 8,9 &10
- Varma, O. P. & Vedanayagam, E. G. (1993). Geography Teaching. N. Delhi: Sterling.
- Cornwell, R. D. (1985). World History in the Twentieth Century. England: Longman.
- Joshi, P. S., Gholkar S.V. (1983). History of Modern India. N. Delhi: S.Chand & Company Ltd.
- Kaur, Dhian & Chandana, R. C. (ed.) (2006). The Earth: Ludhiana: Kalyani Publishers.
- Singh R. L., Singh, Rana, P. B. (2002). Elements of Practical Geography. N. Delhi: Kalyan Publishers.

Unit: 2 Instructional Planning and Designing Lesson Transcripts

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
<ol style="list-style-type: none"> 1. To justify the importance and phases of instructional planning in Social Science discipline 2. To capacitate systematic planning and designs lesson transcripts 3. To develop skills in preparing lesson transcripts 	<ul style="list-style-type: none"> • Instructional planning –Importance, Phases, Types - Year plan, Unit plan, Lesson plan • Procedure for the Preparation of year plan, unit plan and lesson plan • Designing Lesson Transcripts 	<p>Group discussion</p> <p>Co-operative learning</p> <p>Meaningful verbal learning</p> <p>Prepare model year plan, Unit plan & lesson transcripts.</p> <p>Video/ Demo lesson observation</p>	<ul style="list-style-type: none"> • Discussion lessons -5 • Demonstration lessons -3 • Criticism lessons -5 • (Practical evaluation) • Video lesson observation and reporting (CE- Edu.05)

References

- <http://answers.yahoo.com/question/>
- http://www.ierng.net/lessonplans/unit_plans.php
- Green, G.H. (1987). Planning the Lesson. London: Longman
- <http://en.wikipedia.org/wiki/Wiki>
- Kumar, S.P.K & Noushad,P.P.(2009). Social Studies in the Classroom: Trends and Methods.
- Bining, A.C & Bining, D.H. (1952) Teaching Social Studies in Secondary Schools. New York: McGraw Hill
- Clark, L.H.(1973). Teaching Social Studies in Secondary Schools.(2nd Ed.)New York: McMillan.
- Green, G.H. (1987). Planning the Lesson. London: Longman
- <http://en.wikipedia.org/wiki/Wiki>

Unit: 3 Essential Requirements of Teaching Social Science Education

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To equip prospective teacher educands in developing teaching skills through micro teaching practices 2. To generate skill orientation among prospective teacher educands through practical experiences	<ul style="list-style-type: none"> • Essential requirements – Teaching Competencies and Skills. • Micro teaching - Meaning, Phases, steps. • Micro teaching skills – (minimum 10 skills) • Micro teaching – Lesson templates, Practice and assessment mechanisms. • Skills in using ICT • Link practice 	Experiential learning Demonstration Reflective practices General discussion Demonstration method Analysis of video performance	<ul style="list-style-type: none"> • Micro teaching lesson notes/plans (Ten skills/ 2 skills per student) • Performance in skill presentation (Practical evaluation)

References

- <http://www.scribd.com/doc/24590843/Micro-Teaching-Skills>
- Allen, D & Ryan, K (1969). Micro teaching. London: Addison Wesley
- Aggarwal, J.C. (1996) A Practical Approach. New Delhi : Vikas Publishing House Pvt. Ltd.
- Dave, Pushkin (2001) Teacher Training. California : ABC CLIO
- Kochhar, S.K. (1985). Methods and Techniques of Teaching. New Delhi : Sterling Publishers Pvt. Ltd.,
- Cooper, James M(1990) Classroom teaching skills.US: DC Health & Co

Unit : 4 Instructional Resources in Teaching and Learning of Social Science

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To conscientize the inevitable role of various instructional support in effective instructional practices. 2. To acquire skills in constructing and using different instructional aids.	<ul style="list-style-type: none"> • Instructional Resources: textbook, workbook, handbook, source book. • Resource Mapping • Instructional aids: Importance, educational values, classification of learning aids: projected, Non-projected and activity aids. • Hands on experience: Computer, LCD Projector, Interactive white board and multi media 	General discussion Workshop Displays Prepare resource map for effective utilization in Social Science	<ul style="list-style-type: none"> • Handling of various instructional aids. • Social Science club activity- Workshop to prepare a source book or innovative instructional aid/ Resource map (CE-Edu.05)

References

- Skinner, B. F. (1968). The Technology of Teaching. New Jersey: Prentice Hall.
- Kilpatrick, W. H. (1969). The Project Method. New York: Teachers' College Press
- Aggarwal, J.C. (2003). Teaching of Social Studies: A Practical Approach. Mumbai: Vikas Publishing House.
- Kumar, S.P.K & Noushad, P.P. (2009). Social Studies in the Classroom: Trends and Methods.
- Pathak R.P. (2012). Teaching of social studies. Pearson, Delhi
- Entwistle, N.J. (1987). Understanding Classroom Learning. London: John Wiley
- Skinner, B. F. (1968). The Technology of Teaching. New Jersey: Prentice Hall.
- http://religionmanuals.tpub.com/14229/css/14229_322.htm .
- <http://en.wikipedia.org/wiki/Wiki>

EDU – 04.11 : Theoretical Base of Geography Education

Hours of interaction: 60 (instruction) +30 (activities / processes)

Objectives :

- To familiarize with the conceptualized version of components require to enter in teaching profession
- To mould the prospective teacher educators to uphold the professional spirit
- To acquaint with the nature, scope and modern concepts of Geography
- To understand the new perspectives of Geography along with its correlative and nationalistic views
- To identify and analyze the aims objectives and values of teaching Geography
- To identify the need of objective based instruction
- To analyze the unique features of different instructional methods, suited for teaching Geography instruction
- To identify and select the most appropriate teaching- learning methods and strategies in varied context and content.

Contents :

- **Unit 1 : Introduction to Teaching and Learning of Geography**
- **Unit 2 : Nature, Scope and Development of Geography Education**
- **Unit 3 : Aims and Objectives of Teaching Geography**
- **Unit 4 : Methods and Strategies in Geography instruction**

Unit. 1 Introduction to Teaching and Learning of Geography (16 hours + 6 hours)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To familiarize with the conceptualized version of components required to enter in teaching profession	<ul style="list-style-type: none">• Teaching – nature, significance, principles• Learning – as a process, features, laws and learning environment• Students in a class- nature, role and mind set	Meaningful verbal presentation Brain storming Case analysis of 2 or	<ul style="list-style-type: none">• Report writing and verification• Case analysis• Identification and presentation

<p>2. To mould the prospective teacher educators to uphold the professional spirit</p> <p>3. To develop professionalism and professional ethics among Geography teachers.</p>	<p>of learners</p> <ul style="list-style-type: none"> • Constructivist teaching and learning • Geography Teacher • Personal qualities and different roles • Professional qualities and competencies • Professional ethics • Programmes for improving professional efficiency • As Continuing Professional Development (CPD) and reflective practitioner and digital migrant 	<p>3 famous teachers</p> <p>Buzz session to generate varied role of an ideal teacher</p> <p>Lecture</p> <p>Discussion</p> <p>Online learning</p> <p>Internet access</p>	<ul style="list-style-type: none"> • Assessment and reflection
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Reference

- [http://www.wikihow.com/Be-a-Professional – Teacher](http://www.wikihow.com/Be-a-Professional-Teacher)
- <http://www.ed.policythoughts.com>
- Edigar, M and Rao. B (2003). Teaching Social studies successfully. New Delhi: Discovery Publishing House
- Arora M.L (1979) Teaching of Geography, Prakash Brothers, Ludhiana
- Gopill G.H (1966) Teaching of Geography, Macmillaa, London
- Verma O.P , Vedanayagam E.G (1987) Teaching of Geography, Sterling Publishers Pvt Ltd. New Delhi
- Gardner.H (1983) Frames of Mind. The Theory of Multiple Intelligences. New York. Basic Books
- Kincheloe. J (2008) Critical Pedagogy. 2nd Edition. New York Peter lang.
- Fosnot. C(1996) Constructivism; Theory perspectives and Practices. New York; Teachers college Press
- Roblyer. M.D. (2008) Integrating Educational Technology into Teaching: New Delhi; Pearson.
- Elizabeth Perrot (1982), Effective Teaching Singapore: Longman
- Donald. P.K & Paul D.E (2007) Learning and Teaching USA: Pearson Education

Unit. 2 Nature, Scope and Development of Geography Education (11 Hours + 6 Hours)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To acquaint with the meaning, nature, scope and modern concepts of Geography 2. To identify the subject matter organization process in social science 3. To analyze the correlation of Geography with other subjects 4. To understand the new perspectives of Geography and its nationalistic views	<ul style="list-style-type: none"> • Meaning, definition, nature and scope of Geography • Need, significance and modern concepts of Geography • Geography as a fused, integrated and correlated discipline • Correlation of Geography with other social sciences, sciences, languages and life situations • Geography and, National Integration and International Understanding • New perspectives in Geography • Systematic/ scientific Geography • Earth science/ Environmental science • Science of Aerial / Spatial / Regional differentiation 	Meaningful verbal learning Participatory approach Co-operative learning Discussion Brain storming Lecture Web search Online learning	<ul style="list-style-type: none"> • Preparation of report on teacher presentation • Internal tests for Unit 1& 2(CE-1) • Assessment /reflection

Reference

- [www. empowering vision.org](http://www.empowering vision.org)
- <http://serc.carleton.edu>
- <http://www.ecosensorium.org>
- AroraM.L (1979) Teaching of Geography, Prakash Brothers, Ludhiana
- Gopill G.H (1966) Teaching of Geography, Macmillan, London
- Garnett, Olive (1967) Fundamentals in school Geography. Harrap and Company, London
- VermaO.P, and Vedanayagam. E.G (1987) Teaching of Geography, Sterling Publishers Private Limited, New Delhi

- UNESCO Source Book for Geography Teaching (1982), London. Logman's Green and Company
- Prasad Jagdish (1982), Teaching of Geography, Vinod Pustak Mandir, Agra
- Singh H.W (1985) Teaching of Geography, Vinod Pustak Mandir, Agra
- Secondary and Higher Secondary Textbooks of SCERT/ NCERT

Unit. 3 Aims and Objectives of Teaching Geography (18 Hours + 9 Hours)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To identify and analyze the aims objectives and values of teaching Geography 2. To identify the need of objectives based instruction 3. To familiarize with the taxonomy of instructional objectives in Geography Education 4. To gain an outlook of constructivist, and behaviourist approaches in Geography Education and their implications	<ul style="list-style-type: none"> • Aims, objectives, values- definition and meaning • Objectives based instruction and its need • Learning objectives and learning outcomes • Aims, objectives and values of teaching Geography • Bloom's Taxonomy of Educational objectives old and revised patterns- instructional objectives and specifications • Behaviourism cognitivism and constructivism • Implications of theories of Piaget, Bruner, Vygotsky and Howard Gardner in Geography teaching and learning 	Meaningful verbal learning Discussion Brainstorming Analytical study Group investigation Present Assignments and prepare notes Lecture Web search Internet access	<ul style="list-style-type: none"> • Report presentation and verification • Assessment/ reflection

Reference

- <http://www.unco.edu/cetl/sir//statingoutcome/document>
- Bloom, B.S (1956), "Taxonomy of Educational objectives" Cognitive Domain. New York: David McKay Co.
- Krathwohl et al., Taxonomy of Educational objectives, Hand book II: Affective Domain: McKay: New York
- Anderson, W.L and Krathwohl., D , R, A Taxonomy for Learning, Teaching and Assessing: A Revision of Bloom's Taxonomy of Educational objectives, Allyn & Bacon: Boston.
- Gronlund, N.E (1970). Stating Behavioural Objectives for classroom instruction. London: MacMillan
- NCERT (1989). Instructional objectives of school subjects. New Delhi : NCERT
- Aggarwal. J.C (1996) Teaching of Social Science A practical Approach: New Delhi, Vikas Publishing house Pvt. Ltd.
- Chauhan.S.S. (2006) Advanced Educational Psychology, New Delhi
- Mangal S.K (2007) Human Development and Learning Crow. L.D and Crow Alice
- Entwistle N.J (1987) Understanding classroom Learning London: John Wiley
- Freire, Paulo (1998) Pedagogy of the oppressed, USA : continuum pub. Com
- Gardner.H (1983) Frame of Mind: The Theory of Multiple Intelligence. New York: Basic Books
- Goleman, D (1995) Emotional Intelligence. New York: McGraw Hill
- Kincheloe.J (2008) Critical Pedagogy (2nd Edition) New York: Peter Lang
- NCF (2005), KCF (2007)

Unit 4 Methods and Strategies in Geography Instruction (16 hours + 8 Hours)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To analyze the unique features of different methods suited for Geography instruction 2. To develop proficiency in selecting suited methods and strategies in varied context and content in Geography education	<ul style="list-style-type: none"> • Methods of teaching Geography • Need, significance, importance • Lecture. Discussion/ Project, Source, storytelling, Regional method Debate, seminar • Instructional strategies in Geography • Meaning, purpose characteristics • Strategies based on NCF/ KCF • Various techniques of instruction in 	Discussion Seminar Buzz session Verbal learning Debate Collaborative learning Comparing different method & strategies <ul style="list-style-type: none"> • Group 	<ul style="list-style-type: none"> • Report presentation and verification • Seminar preparation presentation and report • CE.2 • Assessment/ reflection

3. To differentiate methods strategies and techniques of Geography instruction	Geography <ul style="list-style-type: none"> • Observation/ Narration/ Dramatization • Co-operative/ collaborative learning • Brainstorming and Peer- tutoring 	discussion and prepare notes Present assignments Internet access Web search	
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Reference

- [www. books google.co.in](http://www.books.google.co.in)
- www.flipkart.com
- <http://www.celt.iastate.edu/creativity/techniques.html>
- Alexey Semenov, UNESCO (2005) Information and Communication Technologies in Schools: A hand book for Teachers.
- Roblyer M.D (2008) Integrating Educational Technology into Teaching. New Delhi: Pearson
- Fitchman & Silva (2003) The Reflective Educator's Guide to classroom Research. California: corwin Press, Inc
- Entwistle N.J (1981) Style of Learning and Teaching London: John Wiley and sors
- Fosnot. C (1998) Constructivism: Theory Perspective and Practice. New York: Teacher's college Press

EDU – 05.11 : Pedagogical Content Knowledge Analysis- Geography

/Hours of Interaction –60 (Instructional) +30 (activities/Process)

Objectives :

- To understand the key aspects involved in systematic PCK analysis
- To develop skills in analyzing the content of Secondary level Geographic content materials
- To justify the importance and phases of instructional planning in Geography
- To equip prospective teacher educands in developing teaching skills through micro- teaching practices
- To conscientize the inevitable role of various instructional support in effective instructional practices.
- To become competent in developing suitable testing mechanisms

CONTENTS :

- **Unit 1 : Introduction to Pedagogic Content Knowledge Analysis**
- **Unit 2 : Instructional Planning and Designing Lesson Templates**
- **Unit 3 : Essential Requirements for Teaching Geography**
- **Unit 4 : Instructional Resources in Teaching and Learning of Geography**

Unit 1. Introduction to Pedagogic Content Knowledge Analysis (16 Hours + 7 Hours)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To understand the key aspect involved in systematic PCK analysis 2. To establish relationship between Pedagogic knowledge with content analysis 3. To develop skill in analyzing the	<ul style="list-style-type: none"> • Pedagogic content Knowledge (PCK) analysis – Meaning, definition, objectives scope, Significance and dimensions • Relationship between PCK and Content analysis identifying facts, concepts, principles etc. • Content analysis of secondary level 	Narrative expression Assignment Meaningful verbal learning Textbook analysis Collaborative learning	<ul style="list-style-type: none"> • Assessment of learning process and reflections • Brief report on text book analysis • Content analysis presentation

content of secondary level Geography and Economics content materials	Geography and Economic content materials	Group discussion Prepare content analysis of a unit by each student after discussion Web search Internet access	
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Reference

- [www. Moodle.org](http://www.Moodle.org)
- <http://www.csun.edu/Science/ref/pedagogy/pck>
- [http://en.wikipedia.org/wiki/technological pedagogical](http://en.wikipedia.org/wiki/technological_pedagogical)
- Barnard.H.C (1963) Principles and Practices of Teaching Geography, Bihar Hind Grandh Academy, Patna
- Prasad Jagdish (1982). Teaching of Geography, Vinod Pustak Mandir, Agra
- Singh.H.W (1985). Teaching of Geography, Vinod Pustak Mandir, Agra
- Robin Alexander (2008) Essay on Pedagogy.USA: Routledge
- Arora M.L (1970). Teaching of Geography, Prakash Brothers, Ludhiana
- Social science II textbook of std. 8, 9 & 10 of Kerala
- Kaur, Dhian & Chandana; P.C (2006). The Earth: Ludhiana: Kalyani Publishers
- Singh R.L, Singh, Rana, P.B (2002). Elements of Practical Geography. New Delhi: Kalyan Publishers
- Philp. M Anderson (2009) Pedagogy. New York: Peter Lang Publishing, Inc.

Unit 2. Instructional Planning and Designing Lesson Templates (19 Hours + 8 Hours)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To justify the importance and phases of Instructional Planning in Geography 2. To capacitate systematic planning and designs of lesson templates 3. To develop skills in preparing lesson templates	<ul style="list-style-type: none"> • Planning for instruction – need and importance • Types of plan – Year Plan, unit plan/ Syllabus grid, Resource Plan- their need, significance steps and procedure for preparation • Lesson templates/ Teaching Manuals – • Need characteristics, principles, values and advantages • Designing / format and steps in criticism 	Group discussion Co- operative learning Meaningful verbal learning Prepare model year plan/ unit plan Prepare script for video lesson Prepare ICT enabled lesson Video lesson / demonstration classes -observation Online learning Web search	<ul style="list-style-type: none"> • Discussion lesson • Videos observation • Script for video lesson • ICT enabled lesson plans • Demonstration lesson • Criticism lesson (practical evaluation) • Internal Test (Unit 1 & 2) CE-1

Reference

- [http://answers . yahoo.com/question](http://answers.yahoo.com/question)
- <http://www.ierg.net/lessonplans/unit plans.php>
- Geography textbook of standard 8-10th of Kerala state /Teachers Hand book in Geography for standards 8, 9 & 10
- Green. G.H (1978) Planning the lesson, London; Longman
- <http://en.wikipedia.org/wiki/wiki>
- Sigh. R.L, Singh, Rana, P.B (2002) Elements of Practical Geography: New Delhi, Kalyan Publications
- NCERT: Standard 11th 12th Geography textbook

- NCERT: Geography practical text book
- Verma. P.O and Vedanayagam, E.G. (1987), Teaching of Geography Sterling publishers private limited, New Delhi

Unit 3. Essential Requirements for Teaching Geography (14 Hours + 6 Hours)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To equip prospective teacher educators in developing teaching skills through micro- teaching practices 2. To generate skill orientation among prospective teacher educands through practical experiences 3. To familiarise with the basic requirements for learning	<ul style="list-style-type: none"> • Requirements for learning –process skills and pre- requisites • Student skills and student efforts in learning • Teaching- learning skills and competencies • Skills in using ICT • Micro- teaching • Meaning, concepts, principles • Phases, steps, skills • Link practices • Lesson templates, practice and assessment mechanisms 	Demonstration Reflective practices General discussion Analysis of video performance Experimental learning Web search Online learning	<ul style="list-style-type: none"> • Micro- teaching lesson notes/ plans (Ten skills) one skill per student • Performance in skill presentation (practical evaluation) • Assignments

Reference

- [http://www.scribd.com/doc/24590843/micro-teaching skills](http://www.scribd.com/doc/24590843/micro-teaching-skills)
- Allen, D and Ryan. K(1969) Micro teaching. London. Adison Wesley
- Kochhar. S.K (1985). Methods and Techniques of Teaching New Delhi: Sterling publishers Pvt. Ltd
- Varma. O.P & Vedanayagam E.G, (1993), Geography teaching, New Delhi, sterling Publishers
- Edgar. M & Rao. B (2003) Teaching social studies successfully, New Delhi: Discovery Publishing House
- Dave, Pushkin (2001). Teacher Training California: ABC CL 10
- Cooper, James. M (1990). Classroom Teaching Skills. US: DC Health. Co

Unit 4. Instructional Resources in Teaching and Learning of Geography (14 Hours + 6 Hours)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To conscientize the inevitable role of various instructional support in effective instructional practices 2. To acquire skills in constructing and using different instructional aids 3. To familiarize with the basic resources for teaching Geography	<ul style="list-style-type: none"> • Instructional Resources- need, significance, values and types • Local resources and its importance in Geography • Text book – importance, characteristics and criterion for selection • Hand books, Sourcebooks, Workbooks, Reference books • Graphic aids – charts graphs, picture, maps, atlas 3D- aids –globe, models, relics • Audio/ AVaids- Radio, TV, film, computers • Display boards- chalkboard, bulletin boards, Interactive board • Projected aids- OHP, LCD, Video • Activity aids – Excursion , field trips 	Demonstration Illustration General discussion Workshop Displays Lecture Observation Preparing assignments Internet access Web search	<ul style="list-style-type: none"> • Handling of various instructional aids • Seminar (preparation presentation and report) • CE-2 • Observe and practice usage of learning aids during school induction programme and practice teaching • Working for preparation of innovative learning aids/ instructional resources

Reference

- <http://e.wikipedia.org/wiki/wiki> Anora. M.L (1979) Teaching of Geography, Prakash Brothers, Ludhiana
- Gopill. G.H (1966) Teaching of Geography, Macmillan, London
- Varma O.P & Vedanayagam, E.G (1993) Geography Teaching, New Delhi, Sterling Publishers
- UNESCO Source book in Geography Teaching (1982), London, Longman's Green and company
- Barnard. H.C. (1963), Principles and Practices of Teaching Geography Bihar Hindi. Grandh Academy, Patna
- Singh. EW (1985) Teaching of Geography, Vinod Pustak Mandir, Agra
- Skinner, B.F (1998). The Technology of Teaching New Jerse, Prentice Hall
- Entwistle. N.J (1982) Understanding classroom learning London: John Wiley

EDU- 04.12 – THEORETICAL BASE OF COMMERCE EDUCATION

(Theoretical discourses - 60 Hrs + CE- 30 Hours)

Objectives

- To familiarize with the conceptualized version of components required to enter in teaching profession
- To mould the prospective teacher educators to uphold the professional spirit in diverse angles
- To equip with varied dimensions of commerce education strands
- To compete with constructs aims and objectives of teaching commerce
- To gain an outlook of key ideology in the psychological bases in commerce education
- To analyze the unique features of different instructional methods suited for teaching commerce
- To proficient in select most appropriate teaching methods in varied context and content
- To opt and practice apposite techniques to extract process and product in commerce teaching
- To interlock 'strategies in teaching' in effective instructional practices of commerce education
- **Contents :**
- **Unit: 1 Introduction to Teaching and Learning**
- **Unit: 2 Nature, Scope and Development of Commerce Education**
- **Unit: 3 Aims and objectives of teaching Commerce**
- **Unit: 4 Instructional Methods, Techniques and strategies in Commerce Teaching**

Unit: 1 Introduction to Teaching and Learning (14 Hrs + 6 Hrs)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To familiarize with the conceptualized version of components required to enter in teaching profession	<ul style="list-style-type: none"> • Teaching - profession and service, Principles and Maxims of teaching, Instruction, Factors determine effective instruction, classroom Interactions, Learner, Learning, Learning environment, classroom as a social laboratory. 	Meaningful verbal presentation Brain storming Case analysis of 2/3 famous teachers Buzz session to	<ul style="list-style-type: none"> • Idea generating exercises • Case analysis presentation

2. To mould the prospective teacher educators to uphold the professional spirit in diverse angles	<ul style="list-style-type: none"> Teacher, Teacher as professional; Continuing Professional Development (CPD), Teacher responsibilities; multifarious roles: knowledge worker, facilitator, scaffolder, mentor, social engineer, counselor, reflective practitioner and digital migrant. 	generate varied roles of an ideal teacher	
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Unit: 2 Nature, Scope and Development of Commerce Education. (12 Hrs + 7 Hrs)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To acquaint with the basic concepts of commerce as a discipline 2. To equip with varied dimensions of commerce education strands. 3. To integrate essential inter disciplinary attributes in commerce education.	<ul style="list-style-type: none"> Commerce as a distinctive discipline, Scope of commerce in nation's prosperity, Modernization of commerce through technological advancement and LPG. Commerce education: Meaning, Definitions and Nature – Academic and Vocational. Significance and Historical development of Commerce education. Values attained through commerce education. Interdisciplinary approach in Commerce Education Correlation of Commerce education with other subjects – Geography, Mathematics, Economics, and Statistics. 	Meaningful verbal learning Participatory approach Open forum discussion Co- operative learning Discussion	<ul style="list-style-type: none"> Preparation of report on teacher Presentation Comparison grid preparation - Correlation of Commerce education with other subjects

UNIT: 3 Aims and objectives of Teaching Commerce (14 Hrs + 10 Hrs)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To compete with constructs aims and objectives of teaching commerce 2. To endow with the significance of Taxonomy of instructional objectives in commerce education.	<ul style="list-style-type: none"> • Aims of Teaching Commerce • General objectives of teaching commerce • Bloom's taxonomy of Instructional objectives (Revised) • Objectives –NCERT • Curricular objectives and Principles of framing curricular objectives. 	General discussion Analytical study Group investigation Focus group discussion	<ul style="list-style-type: none"> • Comparative analysis - Bloom's taxonomy of Instructional objectives traditional with Revised one

UNIT 4: Instructional Methods, Techniques and Strategies (20 Hrs + 7 Hrs)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To analyze the unique features of different instructional methods suited for teaching commerce 2. To proficient in select most appropriate teaching methods in varied context and content. 3. To opt and practice apposite techniques to extract process and product in commerce teaching	<ul style="list-style-type: none"> • Methods of teaching – criteria for selecting appropriate instructional methods, Lecture Method, Project method, socialized methods – Group discussion, seminar, debate, symposia, workshop, Problem solving method, Case study, Source method, Inductive and Deductive, Analytical and Synthetic method. • Techniques of Teaching – Drill, Brain storming, Role play, Review, Dramatization, Buzz session, simulation, Quiz session. • Instructional strategies – Co operative learning strategies, Collaborative learning strategies, Scaffolding strategies. 	Seminar Debate Buzz session Quiz session Problem solving method Project method	<ul style="list-style-type: none"> • Report presentation & verification

References

- Aggarwal, J.C. (1996) A Practical Approach. New Delhi : Vikas Publishing House Pvt. Ltd.
- Anderson,W. L and Krathwohl,D,R, A Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives. Allyn & Bacon: Boston.
- Bloom, B. S. (956). Taxonomy of Educational Objectives: Cognitive Domain. New York: David Mckay Co.
- Gronlund,N.E(1970) Stating Behavioural objectives for class room instruction. London: MacMillan
- Krathwohl.et.al, Taxonomy of Educational Objectives, Hand Book II: Affective Domain. McKay: New York.
- Kumar, Mahesh (2004). Modern teaching of commerce. New Delhi: Anmol Publications Ltd
- N.C.E.R.T. (1989). Instructional objectives of school subjects. New Delhi: N.C.E.R.T
- Raj, Rani Bansal (1999). Models of teaching and concepts of learning. New Delhi: Anmol Publications.
- Raj, Rani Bansal (1999). New trends in teaching of Commerce: Models of teaching and concepts of learning. New Delhi: Anmol Publications.
- Rao, Digumarti Bhaskara (2006) Methods of teaching commerce(2006). New Delhi: Discovery publishing house
- Rao, Seema(2005) Teaching of Commerce. New Delhi: Anmol Publications Ltd
- Singh, V.K (2006). Teaching of Commerce. New Delhi: A.P.H.Publishing corporations.

EDU – 05.12: PEDAGOGIC CONTENT KNOWLEDGE ANALYSIS – COMMERCE

(Theoretical discourses- 60 Hrs + CE- 30 Hrs)

Objectives

- To understand the key aspects involved in systematic PCK analysis
- To develop skill and competencies in analyzing the content of higher secondary commerce text book
- To justify the importance and phases of instructional planning in commerce discipline
- To analyze the essential pre requisites/requirements for teaching commerce education
- To capacitate systematic planning and to develop skills in designing lesson templates
- To equip prospective teacher educands in developing teaching skills through micro teaching practices
- To conscientize the inevitable role of various instructional resources in effective instructional practices.

Contents :

- Unit 1 Introduction to Pedagogical content knowledge analysis**
Unit 2 Instructional Planning and Designing Lesson Templates
Unit 3 Essential Requirements for Teaching Commerce Education
Unit 4 Instructional Resources in Teaching and Learning of Commerce

Unit: 1 Nature and Scope of Pedagogical content knowledge analysis (11 Hrs + 6 Hrs)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To understand the key aspects involved in systematic PCK analysis 2. To be capable of establishing relationship between pedagogic with content analysis	<ul style="list-style-type: none">• Pedagogical content knowledge analysis (PCK) -Meaning, Scope, Features of PCK analysis, significance of PCK analysis in commerce discipline.• Relationship between pedagogic with content analysis Content Analysis – Procedure, facts, concepts, principles,	Narrative expression session Text book analysis Collaborative learning Discussion	<ul style="list-style-type: none">• Pedagogic Content Knowledge analysis presentation• Brief report on higher secondary text book analysis

3. To develop skill in analyzing the content of higher secondary commerce text book	process, rules, equations. • Content analysis of higher secondary business studies and accountancy text book.	Self directed learning	
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Unit: 2 Instructional Planning and Designing Lesson Templates (20 Hrs + 12 Hrs)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To justify the importance and phases of instructional planning in commerce discipline 2. To capacitate systematic planning and designs lesson templates 3. To develop skills in preparing lesson plan	<ul style="list-style-type: none"> • Instructional planning –Importance, Phases, Types - Year plan, Unit plan, Lesson plan, Resource unit • Procedure for the Preparation of year plan, unit plan and lesson plan • Designing Lesson Templates – Business Studies and Accountancy. 	Descriptive method Group discussion Demonstration method Co-operative learning Meaningful verbal learning	<ul style="list-style-type: none"> • Discussion lessons (5 Nos) • Video observation (2 Nos) • Script for video lesson(1 No) • ICT enabled lesson plan(1 No) • Demonstration lessons(3 Nos) • Criticism lessons(5 Nos)

Unit: 3 Essential Requirements of Teaching Commerce Education (16 Hrs + 6 Hrs)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To equip prospective teacher educands in developing teaching skills through micro teaching practices	<ul style="list-style-type: none"> • Essential requirements – Teaching Competencies and Skills. • Micro teaching - Meaning, Phases, steps. • Micro teaching – Lesson templates, Practice 	Experiential learning Demonstration Reflective practices	<ul style="list-style-type: none"> • Micro teaching lesson notes/plans (Ten skills/1 skill per student) • Performance in skill presentation

2. To generate skill orientation among prospective teacher educands through practical experiences	and assessment mechanisms. <ul style="list-style-type: none"> • Skills in using ICT • Link practice. 	General discussion Demonstration method Analysis of video records	
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Unit: 4 Instructional Resources in Teaching and Learning of Commerce (13 Hrs + 6 Hrs)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To conscientize the inevitable role of various instructional support in effective instructional practices. 2. To acquire skills in constructing and using different instructional aids.	<ul style="list-style-type: none"> • Instructional Resources: textbook, workbook, handbook, source book. • Resource Mapping • Instructional aids: Importance, educational values, classification of learning aids: projected, Non-projected and activity aids. • Hands on experience: Computer, LCD Projector, Interactive white board and multi media 	Illustration Demonstration General discussion Workshop Displays Demonstration	<ul style="list-style-type: none"> • Text book analysis • Workbook preparation • Handling of various instructional aids

References

- Aggarwal, J.C. (1996) A Practical Approach. New Delhi : Vikas Publishing House Pvt. Ltd.
- Allen, D & Ryan, K (1969). Micro teaching. London: Addison Wesley
- Cooper, James M (1990) Classroom teaching skills. US: DC Heath & Co
- Dave, Pushkin (2001) Teacher Training. California : ABC CLIO
- Entwistle, N.J. (1987). Understanding Classroom Learning. London: John Wiley
- Green, G.H. (1987). Planning the Lesson. London: Longman
- Higher secondary business studies and accountancy text book (Plus 1 & Plus 2). SCERT, KERALA

- Kilpatrick, W. H. (1969). The Project Method. New York: Teachers' College Press
- Kochhar, S.K. (1985). Methods and Techniques of Teaching. New Delhi : Sterling Publishers Pvt. Ltd.,
- Kumar, Mahesh (2004). Modern teaching of commerce. New Delhi: Anmol Publications Ltd
- Raj, Rani Bansal (1999). New trends in teaching of Commerce New Delhi: Anmol Publications.
- Raj, Rani Bansal (1999). New trends in teaching of Commerce: Models of teaching and concepts of learning. New Delhi: Anmol Publications.
- Raj, Rani Bansal (1999).Models of teaching and concepts of learning. New Delhi: Anmol Publications.
- Rao, Digumarti Bhaskara(2006) Methods of teaching commerce(2006). New Delhi: Discovery publishing house
- Rao, Seema(2005) Teaching of Commerce. New Delhi: Anmol Publications Ltd
- Singh, V.K (2006). Teaching of Commerce. New Delhi: A.P.H. Publishing corporations.
- Skinner, B. F. (1968).The Technology of Teaching. New Jersey: Prentice Hall.
- Teacher's handbook of business studies and accountancy text book (Plus 1 & Plus 2). SCERT, KERALA
- http://religionmanuals.tpub.com/14229/css/14229_322.htm
- <http://www.scribd.com/doc/24590843/Micro-Teaching-Skills>
- <http://answers.yahoo.com/question/>
- <http://en.wikipedia.org/wiki/Wiki>
- http://www.ierg.net/lessonplans/unit_plans.php
- <http://www.csun.edu/science/ref/pedagogy/pck/>
- http://en.wikipedia.org/wiki/Technological_Pedagogical

EDU - 04.13 :THEORETICAL BASE OF HOME SCIENCE EDUCATION

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

Objectives:

- To make the prospective teachers understand the scope and nature of Home Science teaching at different levels of learning
- To get acquainted with the aims and objectives of teaching and learning Home Science
- To acquire the fundamentals of theory and practice of principles and procedures of teaching and learning of Home Science
- To develop an understanding of different methods, strategies and techniques possible in teaching and learning of Home Science

Contents:

- **Unit 1:** General Introduction to Teaching and learning
- **Unit 2:** Home Science – A conceptual Analysis
- **Unit 3:** Aims and Objectives of Teaching Home Science
- **Unit 4:** Methods and Strategies for Teaching Home science

Unit I: General Introduction to Teaching and Learning (10+5=15 hours)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To acquaint student teachers with the process of teaching learning in the changing scenario 2. To familiarize with the maxims of teaching 3. To understand the concept of learning given by behaviourists, cognitivists and constructivists 4. To familiarize with the changing classroom environment	<ul style="list-style-type: none"> • Classroom as an organization-Teacher and Learner, Definitions of learning from different point of view (behaviouristic, cognitive and constructivist), Interdependence of Teaching-Learning process. • Changing concept of classroom environment- classroom climate- An introduction to conducive, learner friendly, inclusive, Virtual learning environment (VLE) and Classroom without walls 	Meaningful verbal expression Group discussion Narrative expression sessions in small or medium groups PBL Video streaming	<ul style="list-style-type: none"> • Performance Assessment in group discussion • Tests • Peer evaluation

<p>5. To develop understanding in Continuing Professional Development</p> <p>6. To acquaint with the qualities, duties and responsibilities of science teacher</p> <p>7. To understand the changing roles of teacher in the present scenario</p>	<p>(CWW).</p> <ul style="list-style-type: none"> • Teacher as a professional- Teacher qualities, competencies and responsibilities. Role of Teacher as manager, leader, knowledge worker, guide, supervisor, mentor, scaffolder, social engineer, reflective practitioner in teaching-learning process. • Maxims of teaching. • Continuing professional development (CPD)-conceptual Analysis. 		
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Unit 2: Home Science – A conceptual Analysis (10+5=15 hours)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
<p>1. To comprehend the nature and scope of Home Science</p> <p>2. To identify concepts in Home Science related to science and art</p> <p>3. To familiarize the development of science in India</p> <p>4. To familiarize the related branches of Home science</p>	<ul style="list-style-type: none"> • Nature of Home science- Home Science- Science as well as art, Areas of Home science • Significance of Home Science education in school curriculum. • Development of science education in India. An introduction to National Scientific Policy Resolution of 1958, Indian Parliamentary and Scientific Committee & Role of NCERT in science education. • Related Branches of Home science- Physiology, Microbiology, Biochemistry, Information Technology. 	<p>Group discussion</p> <p>Seminar</p> <p>Workshop</p> <p>symposium</p>	<ul style="list-style-type: none"> • Document analysis • Online assessment • Quiz programme

Unit 3: Aims and Objectives of Teaching Home Science (25+4=29 hours)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To acquaint with the aims and objectives of teaching Home science 2. To understand the different taxonomies of instructional objectives 3. To identify the importance of objective based instruction	<ul style="list-style-type: none"> • Broad aims of teaching Home science to fulfill the national goals of education with special reference to • Population control • Increase in food production • Eradication of diseases • Better nutrition • Conservation of natural resources • Scientific attitude • Objective based instruction- Instructional objectives, Specific objectives, learning experience, Evaluation • Taxonomy: • Bloom's Taxonomy,1956. • Revised Bloom's Taxonomy(Anderson and Krawthwohl),1990. • Mc Cormack and Yager Taxonomy of Science Education, 1989 • Technology Integrated Taxonomy- Aims and Objectives of teaching Home science with respect to NCF(2005), KCF(2007) 	Meaningful verbal expression Narrative expression sessions in small or medium groups Lecture cum discussion -Digital presentation Blog searching Reflective practices Assignment	<ul style="list-style-type: none"> • Questioning • Participation in group discussions • Participant observation • Tests • Blog posting

Unit 4: Methods and Strategies for Home Science Teaching (25+6=31 hours)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To understand methods, strategies and techniques of teaching Home Science 2. To distinguish between teacher initiated and learner initiated methods 3. To identify and comprehend the different strategies, methods and approaches and techniques in teaching Home Science	<ul style="list-style-type: none"> • An introduction - Meaning and Definition of Strategies, Methods, Techniques and Approaches • Teacher initiated methods- Lecture method and Lecture demonstration method. • Learner initiated methods- Laboratory method, assignment method, Project method, Inductive method, Problem Solving method, Supervised Study • Approaches- Inductive, Deductive, Constructivist, Modular, Multimedia, Interdisciplinary approaches • Techniques- Debate, Seminar, Symposium, Discussion, Discussion 66, Buzz session, Brain storming, Simulation, Role play, Field trip, Panel discussion, Colloquium. • Self instruction strategies- programmed instruction- CAI, CMI • Cooperative /collaborative strategies of learning for less able, able and more able (Differential Teaching) 	Meaningful verbal expression Group discussion Peer instruction Brain storming Debate Symposium Small group projects Explicit teaching	<ul style="list-style-type: none"> • Analysis in group discussion. • Participant observation. • MCQ based discussion. • Project evaluation

Reference

- Aggarwal, J. C. (1997). Essentials of Educational Technology: Teaching Learning Innovations in Education. Vikas Publishing House. Pvt. Ltd.: New Delhi.
- Anderson, L. W., & Krathwohl, D. R. (Eds.). (2000). A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives. New York: Longman.
- Yadav,S.(1994) Teaching of Home Science, New Delhi:Anmol Publications
- Begum, F.(2004) Modern Teaching of Home Science. New Delhi:Anmol Publications
- Bloom, Benjamin Samuel. (1956). Taxonomy of Educational Objectives: The Classification of Educational Goals (Vol.1): Green, Longman.
- Norman herr(2007)The Sourcebook for Teaching Science – Strategies, Activities, and Instructional Resources, ISBN 978-07879-72981 [or 07879-72983] San Franciso,CA John Wiley/Jossey- Bass publishers.
- Government of India, Report of Science Teaching in Secondary Schools, Committee on Plan Projects, New Delhi, 1964.Hodson, D. and D.J. Reid, Science for All Motives, Meaning and Implications, School Science Review, pp. 653-661, 1988.
- Joyce, Bruce, and Weil, Marsha,(1997). Models of Teaching (5thEdn.) New Delhi: Prentice Hall of India.
- Sharma ,R.C. Modern Science Teaching, DhanpatRai and Sons, Delhi.
- Nanda, V.K.(Ed.),Modern Techniques of Teaching (5 Vols.).New Delhi:Anmol Publications.
- Anderson, W. Lorin., and Krathwohl,David. R., A Revision of Bloom's Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educatioal Objectives Complete (Edn.)
- 33.NCF-2005, NCERT, New Delhi.
- NCERT, Government of India, National Curriculum Framework(NCF),2000, New Delhi, 2000.
- NCERT, Government of India, National Curriculum Framework(NCF),2005, New Delhi, 2005.

Internet References

- http://archive.org/stream/modernmethodsand029422mbp/modernmethodsand029422mbp_djvu.txt
- http://books.google.com/books/about/Modern_Methods_and_Mater...
- <http://www.amazon.com/Teaching-Secondary-School-Science-Stra...>
- http://www.ncert.nic.in/new_ncert/ncert/rightside/links/pdf/...
- http://www.ncert.nic.in/right_side/links/pdf/framework/english/nf2005.pdf
- http://www.ssamis.com/web/downloads/KCF%2020_07.pdf

EDU- 05. 13 : PEDAGOGIC CONTENT KNOWLEDGE ANALYSIS - HOME SCIENCE

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

Objectives:

- To develop practical field based skill and experience in resource development and learning experience designing while transacting the Home Science curriculum
- To comprehend the dimensions of pedagogic analysis
- To analyze the Higher Secondary / Vocational Higher Secondary School Home Science Syllabus based on pedagogical Content Knowledge.
- To identify and develop teaching skills specially required for teaching Home Science
- To understand and prepare teaching manuals based on different instructional strategies.
- To prepare and use suitable learning aids for Home Science teaching.
- To enrich the capabilities of prospective Home Science teachers during and after the pre service education

Contents:

- **Unit 1:** Introduction to Pedagogic Content Knowledge
- **Unit 2:** Instructional Planning for teaching Home science
- **Unit 3:** Essential Requirements of Teaching Home Science
- **Unit 4:** Resources in Teaching and Learning of Home Science

Unit 1: Introduction to Pedagogic Content Knowledge (14+7=21 hours)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To understand pedagogic content knowledge (PCK) and find its scope in teaching and learning 2. To understand the steps involved in PCK analysis	<ul style="list-style-type: none"> • Pedagogic Content Knowledge (PCK)- Meaning and Scope. • Content analysis- Meaning, Purpose and steps. • PCK Analysis - Content Analysis, Learning outcomes, Pre requisites, Inputs that enrich 	Meaningful verbal expression Group discussion Document writing	<ul style="list-style-type: none"> • Analysis in group discussion • Report on Higher Secondary / Vocational Higher Secondary text book analysis • Peer evaluation

3. To apply the principles of pedagogic analysis.	learning(Teaching-learning resources, Environmental inputs), Community resources, Enrichment Activities, Assessment techniques, Assignments. <ul style="list-style-type: none"> • PCK Analysis of Home Science content from Higher Secondary/Vocational Higher Secondary school syllabus prescribed by SCERT 	workshop Net surfing	
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Unit 2: Instructional Planning for Teaching Home science (14+8=22 hours)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To acquaint with the planning of instruction 2. To develop understanding of different types of planning 3. To design lesson templates based on different formats	<ul style="list-style-type: none"> • Planning- Need and Importance. • Different types of planning- Purposes and steps-Year Plan, Unit Plan, Resource Unit, Lesson Plan- Herbartian steps Behaviourist and Constructivist formats 	Meaningful verbal expression Group discussion Explicit teaching seminar co-operative learning	<ul style="list-style-type: none"> • Performance assessment in group discussion • Assessment of optional notebook entries • Discussion lesson template preparation (5) • Observation and analysis of video of sample classes (2) • Demonstration lessons (3) • Blog creation

Unit 3: Essential Requirements of Teaching Home Science (18+10=28 hours)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
<ol style="list-style-type: none"> To identify competencies required for a teacher to be professional. To develop understanding of various teaching skills To understand microteaching and its relevance in the development of teaching skills To design, practice and document micro lessons in Home Science 	<ul style="list-style-type: none"> Teacher Competencies-Subject competencies, Pedagogical competencies, Technological competencies. Teaching skills- definition, core teaching skills, components of teaching skills Microteaching - Definitions and meaning, objectives, principles, steps, microteaching cycle Development of selected teaching skills- Set induction, Reinforcement, Explaining, Illustrating with examples, Probing questions, Using chalk board, Stimulus variation, Using audio-visual aids, discussion, promoting pupil participation, Classroom management. Link Practice 	<p>Meaningful verbal expression</p> <p>Group discussion</p> <p>Document analysis and</p> <p>Peer evaluation</p> <p>Document analysis</p> <p>Video observation</p> <p>Reflective practices</p> <p>-</p>	<ul style="list-style-type: none"> Analysis in group discussion Lesson segment preparation Observation schedule designing Think, Pair and Share sessions Recording and evaluation of Micro Teaching Lessons (10 skills / one skill per student) Criticism lessons (5)

Unit 4: Resources in Teaching and Learning of Home Science (12+7=19 hours)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
<ol style="list-style-type: none"> To understand the importance of learning aids and improvised aids in learning Home Science 	<ul style="list-style-type: none"> Design and development of Learning aids and improvised aids for effective learning, significance of audio-visual aids in teaching learning of home science. 	<p>Narrative expression sessions in small or medium groups</p>	<ul style="list-style-type: none"> Participant observation Analysis in group discussion Class test Material Development Circles

<p>2. To acquire hands-on experience in designing and developing suitable learning aids for classroom instruction</p> <p>3. To develop understanding in resource mapping</p>	<ul style="list-style-type: none"> • Text book- Qualities, how to evaluate a good text book in Home Science • Hand book, Source book, Work book, Reference book, Supplementary reading materials • Resource Mapping 	<p>Document analysis</p> <p>You tube resource tapping</p> <p>Drill and Practice</p> <p>Lab sessions</p>	<ul style="list-style-type: none"> • Practicals • Involvement in subject association activity
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Reference

- Julie Gess- Newsome & Norman G. Lederman(1999): Examining Pedagogical Content Knowledge: Netherlands, Kluwer Academic Publishers.
- Jessy Mathews., (2008). Teaching of Natural Science –Theory, Perspectives and Practices. Methodology of teaching life sciences
- Yadav, S. (1994) Teaching of Home Science, New Delhi: Anmol Publications
- Begum, F. (2004) Modern Teaching of Home Science. New Delhi: Anmol Publications
- Mishra R. C. (2008): Lesson Planning: New Delhi, A P H Publishing Corporation.
- Radha Mohan (2007): Innovative Science Teaching: New Delhi, Prentice Hall of India Pvt. Ltd.
- Y K Singh & Archnesh Sharma (2004): Micro Teaching: New Delhi, A P H Publishing Corporation.
- Mangal S. K. & Uma Mangal (2009): Essentials of Educational Technology: New Delhi, PHI Learning Pvt Ltd.
- Seshaiyah P. R., & Rao, D. B. (2004). Methods of Teaching Home Science. New Delhi, Discovery Publishing House
- Sharma, S. (2002). Modern Methods of Teaching Home Science. New Delhi, Sarup & Sons.

Internet References

- <http://instedd.org/technologies/resource-map/>
- http://archive.org/stream/modernmethodsand029422mbp/modernmethodsand029422mbp_djvu.txt
- http://books.google.com/books/about/Modern_Methods_and_Mater

EDU – 101.2 : Yoga, Health and Physical Education

(2 credits – 60 hours & 50 marks)

Objectives

- To get acquainted with the meaning, aims and objectives of Physical Education
- To understand the concept of Physical fitness and chalk out physical fitness workout plans
- To get acquainted with type of exercises and understand the health benefits of physical exercises
- To get acquainted with the Yoga techniques (Pranayamas)
- To understand the Holistic and curative aspects of yoga
- To practice of Yoga & recreational activities

Contents

- Unit - 1 Physical Education-def, meaning, aims and objectives
- Unit - 2 Physical Fitness – definition, components, activities
- Unit - 3 Types of Exercises – Health benefits, effect on physiological systems
- Unit- 4 Concept, principles and practice of Yoga.

Unit – 1: Physical Education-def, meaning, aims and objectives

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To get acquainted with the meaning, aim and objectives of Physical Education	<ul style="list-style-type: none"> • Physical Education – 8 hours • Definition • Meaning, need and importance • Aims and objectives • Dimensions • General health of Students 	Verbal Expression	1. Written test

Unit – 2: Physical Fitness – definition, components, activities

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
<p>1. To familiarize the physical fitness components and the modes of developing them.</p>	<ul style="list-style-type: none"> • Physical Fitness – 12 hours <ul style="list-style-type: none"> ▪ Definition • Components of Physical Fitness • Health related Physical Fitness • Activities for developing Physical Fitness components • Practice 	<p>Theoretical orientation</p> <p>Fitness centre work out sessions</p> <p>Group activity</p>	<ul style="list-style-type: none"> • Projects • (work out plans) • Performance analysis

Unit – 3 :Types of Exercises – Health benefits, effect on physiological systems

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
<p>1. Provide knowledge and understanding regarding the scientific basis and benefits of Physical activity.</p> <p>2. To have a practical knowledge on physical workout plans</p>	<ul style="list-style-type: none"> • Types of Exercises – 15 hours • Aerobic and Anaerobic Exercises • Isotonic ,Isometric and Isokinetic Exercises • Health benefits of Physical Exercises • Effect of exercise on Circulatory, Respiratory and Muscular Systems • Practice of exercises 	<p>Theoretical orientation</p> <p>Fitness centre work out sessions</p> <p>Group activity</p>	<ul style="list-style-type: none"> • Assignments • Group projects

Unit- 4 : Concept, principles and practice of Yoga.

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To get acquainted with the concept and techniques of Yoga (Pranayamas). 2. Holistic and curative aspects of Yoga. 3. Practice of Yoga	<ul style="list-style-type: none"> ● Yoga – 25 hours - Meaning, Concept, history, need and importance of yoga. ● -Principles of Yoga ● -Elements of Yoga ● -Holistic and curative aspects of Yoga - Science of Yoga - Yoga and memory ● -Components that improve memory ; Asanas, Pranayama, Meditation. ● -Pranayama (breathing techniques) ● -Relaxation techniques : Asanas(steps to follow and benefits).-practice of yoga. ● Padmasana ● Siddhasana ● Vajrasana ● Dhanurasana ● Bhujangasana ● Halasana ● Shalabhasana ● Yogamudra ● Naukasan 	<p>Theoretical presentation</p> <p>Demonstration</p> <p>Group activity</p> <p>Partner practice forms.</p>	<ul style="list-style-type: none"> ● Group assessment ● Participation ● Practicing yoga ● Demonstration ● Partner assessment ● Individual assessment

Guidelines for Practical Work

Prepare a personal health chart	- 5 marks	Physical Education Record	- 15 marks
Practice of Yoga	- 10 marks	Internal written examination	- 10 marks
Initiative, effort and participation in games	- 10 marks		

EDU – 101.3 : ART AND AESTHETICS EDUCATION .

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

Contents :

Introduction to Art and Culture.

- Importance of art and art forms in Educational context.
- The need of aesthetic sense for teacher and learner

Fine arts.

- Knowledge and familiarization of Visual arts-painting, drawing, pencil drawing, charcoal and crayon.

Art and culture.

- Cultural depiction in Monuments of India and Kerala, ritual arts, Folk arts, Regional arts forms in Kerala.

Practicals:

- Making of geometrical shapes, greeting cards, fabric painting, glass painting, models, charts etc – 5 nos. (10 marks)
- Visit to any monument of cultural importance (local) and prepare a report (not exceeding 10 pages) on its artistic and cultural relevance (5 marks)
- Write up on any one art form or culture of India/ Kerala -presentation not exceeding 15 pages. (10 marks)