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

Perspectives in Education/Core Subjects:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDU-01</td>
<td>Knowledge and Curriculum: Philosophical and Sociological Perspectives.</td>
</tr>
<tr>
<td>EDU-02</td>
<td>Developmental Perspectives of the Learner.</td>
</tr>
<tr>
<td>EDU-03</td>
<td>Technology and Communication in Education.</td>
</tr>
</tbody>
</table>

Curriculum and Pedagogic Courses/Optional subjects:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDU-04. 1-13</td>
<td>Theoretical Base of ......................Education.</td>
</tr>
<tr>
<td>EDU-05. 1-13</td>
<td>Pedagogic Content Knowledge Analysis : ....</td>
</tr>
</tbody>
</table>
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)

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>To develop the broad concept of education</td>
<td>Meaning and concept of Education</td>
<td>Meaningful verbal expression</td>
</tr>
<tr>
<td>2.</td>
<td>To understand Meaning, definitions and Aims of education</td>
<td>General Aims of education</td>
<td>Role Performance Analysis in group Discussion</td>
</tr>
<tr>
<td>3.</td>
<td>To develop awareness on types and agencies of education</td>
<td>Definitions of Education</td>
<td>Involvement in Debates</td>
</tr>
<tr>
<td>4.</td>
<td>To realise qualities and competencies and professional Ethics of teachers</td>
<td>Formal, informal, and non-formal education</td>
<td>Seminar Presentations</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Child centered and life centered education</td>
<td>Assignments</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Teacher- Qualities and Competencies</td>
<td>Class test</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Teaching- An Art and Science</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Professional Ethics of Teachers</td>
<td></td>
</tr>
</tbody>
</table>
REFERENCES:
- http://www.ncert.nic.in/
- http://teaching.about.com

UNIT II: PHILOSOPHICAL PERSPECTIVES OF EDUCATION (30 hrs)

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
</table>
| 1. To develop personal philosophy of teaching | * Relationship between Philosophy and Education  
* Thoughts on Education - Idealism – Naturalism-Pragmatism -Realism - Humanism- features and educational implications  
* Contributions of thinkers towards curriculum -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 | * Participation and Performance in Quiz Competition  
* Seminar Presentations  
* Class test  
* practicum |
REFERENCES:

- Gandhi m.k. (19037). basic education, navajivan publishing house, Ahmedbad
- George Thomas (2004) Introduction to Philosophy, Delhi, Surjeet Publication
- http://www.mu.ac.in
- 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

UNIT III: SOCIOLOGICAL PERSPECTIVES OF EDUCATION (30 hrs)

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To identify the interactive role of education and society</td>
<td>• Interactive role of education and society</td>
<td>ICT enabled group discussion</td>
<td>• Document Analysis</td>
</tr>
<tr>
<td></td>
<td>• Functions of education with regard to Culture –Preservation, Transformation and Transmission</td>
<td>Field trip</td>
<td>• Field visit reports</td>
</tr>
<tr>
<td></td>
<td>• Acculturation and Enculturation, Cultural lag, cultural inertia, Cultural diffusion</td>
<td>Lecture-discussion</td>
<td>• Class test</td>
</tr>
<tr>
<td></td>
<td>• Role of education to inculcate values connected with Democracy and Secularism</td>
<td></td>
<td>• Role Performance</td>
</tr>
<tr>
<td>2. To develop an understanding about the role of education with regard to culture</td>
<td>• National Integration</td>
<td></td>
<td>• Analysis in group Discussion</td>
</tr>
<tr>
<td>3. To synthesis role of curriculum to inculcate national integration and international understanding</td>
<td>• International Understanding</td>
<td></td>
<td>• Seminar Presentations</td>
</tr>
</tbody>
</table>
REFERENCES:

- Arora G.L & Pranati Panda. Fifty Years of Teacher Education in India (Post Independence Developments): NCERT
- http://www.mu.ac.in/
- http://www.yazour.com/

UNIT IV: EDUCATION AND SOCIAL CHANGE (20 hrs)

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Characteristics of Indian Society – class, religion, ethnicity, language.</td>
<td>Lecture</td>
<td>Initiation and performance in</td>
</tr>
<tr>
<td></td>
<td>Social Change – Factors influencing social changes- Role of Education</td>
<td>Cooperative Learning</td>
<td>dramatization</td>
</tr>
<tr>
<td></td>
<td>Major changes occurred in Indian society</td>
<td>Discussion</td>
<td>Field visit reports</td>
</tr>
<tr>
<td></td>
<td>Conscientisation - Areas where conscientisation is needed</td>
<td>Social Constructivism</td>
<td>Role Performance Analysis in</td>
</tr>
<tr>
<td></td>
<td>Role of education to curb Social evils like Corruption, Terrorism, Antinational</td>
<td></td>
<td>group Discussion</td>
</tr>
<tr>
<td></td>
<td>activities, Violence against women, Drug abuse and Alcoholism etc.</td>
<td></td>
<td>Involvement in Debates</td>
</tr>
<tr>
<td></td>
<td>Teacher as a Change agent and Nation builder</td>
<td></td>
<td>Seminar Presentations</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Class test</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Practicum</td>
</tr>
</tbody>
</table>

REFERENCES:

• 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**

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To develop an awareness about the need for educational psychology for a teacher.</td>
<td>1. Educational Psychology- Meaning, Scope, Limitations and relevance in classrooms</td>
<td>Lectures</td>
<td>• Reflective practices</td>
</tr>
<tr>
<td>2. To develop an understanding of the nature, scope and methods of Educational psychology.</td>
<td>2. Schools of Psychology- Structuralism, Functionalism, Behaviourism, Cognitive, Humanistic and Gestalt Schools</td>
<td>Group discussion on Critical analysis of application of psychology</td>
<td>• Assignments</td>
</tr>
<tr>
<td></td>
<td>3. Scientific method of studying behavior,</td>
<td></td>
<td>• Seminar presentation</td>
</tr>
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<td></td>
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<td></td>
<td>• Test paper</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Performance in discussions</td>
</tr>
</tbody>
</table>
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, Experimental method and Case Study

Comparison of different schools of psychology
Case study
Self analysis

Reference
• 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))

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To develop an understanding of the concept, principles and theories of Growth and development.</td>
<td>• 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 ▪ Physical and motor development ▪ Cognitive development ▪ Language development(Noam Chomsky, Vygotsky)</td>
<td>Group discussion to compare the characteristics of childhood and adolescence Seminars on the highlights of various theories Lecturing</td>
<td>• Reflective practices • Performance in group discussions • Assignments • Seminar presentation • Test paper • Child study reports • Communicative skills • Self study reports</td>
</tr>
</tbody>
</table>
of development
5. To conceptualise the role of teacher in facilitating development of the learner

<table>
<thead>
<tr>
<th>Emotional development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moral &amp; social development-</td>
</tr>
<tr>
<td>Role of teacher in fostering development of the learner.</td>
</tr>
</tbody>
</table>

Application of different methods for understanding adolescent problems
Analysis of theory and its application in different contexts

Reference
- Hurlock, B. Elizabeth(2003)., Developmental Psychology NewDelhi: Mcgraw-Hill

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

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To conceptualise the individual difference among the learners on the basis of intelligence and creativity</td>
<td></td>
<td></td>
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<tr>
<td>2. To develop an understanding of the concept, nature and various theories of intelligence</td>
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<tr>
<td>3. To understand the meaning, nature, process of creativity development and the strategies for fostering</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Meaning and nature of intelligence</td>
<td></td>
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<td></td>
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<tr>
<td>- Theories of Intelligence – two factor, group factor, multi factor, Guilford’s structure of intellect model - Multiple intelligence etc.</td>
<td></td>
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</tr>
<tr>
<td>- Measurement of Intelligence – verbal, nonverbal and performance tests</td>
<td></td>
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</tr>
<tr>
<td>- Emotional intelligence, Social Intelligence, Spiritual Intelligence- Meaning and Scope</td>
<td></td>
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<tr>
<td>- Creativity- meaning and nature -</td>
<td></td>
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<tr>
<td>Lectures</td>
<td></td>
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<tr>
<td>Group discussion</td>
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<tr>
<td>Administer any one intelligence test and familiarize the procedure.</td>
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<tr>
<td>Prepare activities based on the multiple</td>
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</tbody>
</table>

- Practical work |
- Assignments |
- Seminar presentation |
- Test paper |
- Performance based assessment
creativity.
4. To familiarise the measurement of intelligence and creativity

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

Reference

- 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))

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To conceptualise the individual difference among the learners on the basis of Personality</td>
<td>• Concept of Personality- role of heredity and environment, • Approaches to study personality - Psycho</td>
<td>Lectures Case study of unique</td>
<td>• Reflective practices • Assignments • Seminar presentation</td>
</tr>
<tr>
<td>2.</td>
<td>To develop an understanding of the concept of adjustment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>To understand the factors causing maladjustment</td>
<td></td>
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</tr>
<tr>
<td>4.</td>
<td>To familiarise the personality tests</td>
<td></td>
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<tr>
<td>5.</td>
<td>To conceptualise mental health and mental hygiene</td>
<td></td>
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<tr>
<td></td>
<td>analytic theory (Freud), - Type theory, Trait Theory (Allport)</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>• Characteristics of mature personality.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Assessment of personality- techniques and methods- projective techniques</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Adjustment and Maladjustment, Adjustment mechanisms.</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>personalities</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>• Group discussion to identify the characteristics of mature personality</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Administer any one personality test and familiarize the procedure</td>
<td></td>
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<tr>
<td></td>
<td>• Conduct a discussion on teacher’s role in identifying and managing maladjusted learner</td>
<td></td>
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<tr>
<td></td>
<td>• Discussion on mental health programmes</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>7. Action research on adjustment patterns</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Test paper</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Practical works</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Reference**


52
• Nisha, Maimun (2006); Milestones of Child Development; New Delhi: Kalpaz Publications
• Umadevi, M.R.,(2009) Educational Psychology: Theories and Strategies for Learning and Instruction, Bangalore, Sathkruthi Publications

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 ( THEOREY 20 HOURS & PRACTICAL 2 HOURS )

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Educational Technology</td>
<td>Educational technology- concept, objectives and scope.</td>
<td>Narrative session</td>
<td>Evaluation based on documentation</td>
</tr>
<tr>
<td>1. To provide a smooth entry into the field of educational technology</td>
<td>Difference between technology in education (Instructional technology) and technology of education (teaching technology)</td>
<td>Direct instruction</td>
<td>Participant observation</td>
</tr>
<tr>
<td>2. To differentiate between teaching and instructional technology</td>
<td>Verbal interaction</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3. To set a perspective on different approaches of technology

- Approaches of educational technology – Hardware
  - Software
  - Systems approach

Interactive session
- Meaningful verbal expression
- Evaluating the level of participation

4. To familiarize with various agencies and services in the field of educational technology

- Resource centres and services in educational technology
  - CIET (NCERT)
  - SIET
  - EMMRRC
  - UGC-CEC
  - C-DIT
  - EDUSAT
  - NME-ICT
  - NPTEL
  - IT@SCHOOL
  - VICTERS CHANNEL
  - AKSHAYA PROJECT
  - GYAN DARSAN
  - INFLIBNET

Viewing programmes
- Class discussion
- Class seminar
- Assignment
- 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

- Print media-
  - Newspapers
  - Books
  - Journals
  - Magazines

Group discussion
- Small group session
- Participation in group discussion
- Role performance analysis

2. To realize the relevance of mass media in education

- Non print media-
  - mass media (radio, T.V., Films in education)

Group discussion
- General discussion
- Seminar
- Participation in group discussion
- Presentation skill

3. Develops the ability to choose the most suitable learning aid while preparing the teaching lesson

- A-V aids:
  - definition, types
  - audio aids
  - visual aids
  - A-V aids.

Group discussion
- Narrative expression
- Seminar
- On task behaviour in class
- Participation in group
- Presentation skill
4. To differentiate between multimedia and multisensory approach
   • Meaning & concept of Multimedia and Multi sensory approach-
   Meaningful verbal expression
   • Participatory behaviour

5. To familiarize with the classification of A-V aids
   • Dales cone of experience
   Meaningful verbal expression
   • Participation in class activity

6. To familiarize with teleconferencing and its application in classroom
   • Teleconferencing:
     • Audio
     • Video
   Techno-lab activity
   Demonstration
   Meaningful verbal expression
   • 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
   • Interactive white board- uses & advantages over normal chalk board
   Demonstration
   Hands on experience
   • Participation
   • Skill assessment

9. To familiarize with the strategy for digital education in classrooms
   • Smart Classrooms
   Class discussion
   • Participation in the class activity

---

Unit II. Communication Technology (Theory 10 hours)

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To introduce the concept of communication</td>
<td>Communication-: concept, scope types – verbal, non verbal. Style purpose- face to face, formal and informal, one way- two way.</td>
<td>Group discussion</td>
<td>Role performance analysis in group discussion</td>
</tr>
<tr>
<td>2. To familiarize with the various types of communication</td>
<td></td>
<td>Documentation</td>
<td>Evaluation of documentation</td>
</tr>
<tr>
<td>3. To identify different components of classroom communication</td>
<td>Communication cycle- components of classroom communication</td>
<td>Group discussion</td>
<td>Role performance assessment in group discussion</td>
</tr>
<tr>
<td>4. To develop the ability to become an effective classroom communicator.</td>
<td>Classroom as a communication system: components of effective classroom communication</td>
<td>Meaningful verbal expression</td>
<td>Role performance analysis</td>
</tr>
<tr>
<td>5. To plan an effective communication process during the</td>
<td></td>
<td>Group discussion</td>
<td></td>
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</tbody>
</table>
### UNIT III: ICT IN EDUCATION (THEORY 20 HOURS & PRACTICAL 25 HOURS)

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Introduction to ICT in education</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. To familiarize with the role of ICT in education</td>
<td>• Concept and importance of ICT in education</td>
<td>Verbal expression General discussion Assignment</td>
<td>Evaluation based on documentation</td>
</tr>
<tr>
<td>2. To explore applications of ICT in various field of education</td>
<td>• Scope of ICT in Education • Teaching- Learning process • Publication • Evaluation • Research</td>
<td>Group discussion</td>
<td>Role performance analysis</td>
</tr>
<tr>
<td>3. To familiarize with advancements in world wide web</td>
<td>• Trends and advancements in www: Web 1.0 Web 2.0. Web 3.0</td>
<td>Collaborative interaction</td>
<td>Level of participation in group activity</td>
</tr>
<tr>
<td>4. To understand the role to teacher in a digital era</td>
<td>• Teacher in a digital era: Changing roles and competencies</td>
<td>Meaningful verbal expression Active learning activities Brain storming</td>
<td>Assimilating the materials Monitoring participation and performance</td>
</tr>
</tbody>
</table>

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

- Classroom Interaction Analysis – FIACS
- metric construction and interpretation

Hands on experience
Individual practice

- Assessing the skill development
- Mid Sem Exam
B. Enriching classroom practices through web technologies

| 1. Acquaint with various concepts in ICT and its applications in the classroom teaching learning process | • 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. | Meaningful verbal expression
  Practical sessions
  Demonstrations
  Techno lab activities
  Online resources
  Multimedia modes | • Participation in class activity
  • Observation
  • Observation
  • On task behaviour |

| 2. To familiarize with the web resources | • Web services:
  • e-mail
  • chat
  • online forums
  • blog
  • wiki
  • e-library | Demonstration
  Online resources
  Hands on experience
  Techno lab activities | • Participation in activities
  • Skill development
  • On task behaviour |

| 3. To develop the ability to use the web resources | • Academic web resources:
  • e-journals
  • online dictionary | Online resources
  Demonstration |  |

| 4. To familiarize with various free software’s applicable in classroom | • Familiarizing free educational software:
  • Tellurium
  • Kalzium
  • Tropic 2 D Magic
  • G-Compris
  • Geogebra. | Demonstration
  Techno lab activities
  Hands on experience
  Peer group instruction | • Performance assessment in techno lab activities
  • On task behaviour |

| 5. To develop skill in using software’s for enriching classroom activity | • e-learning –concept, types –synchronous and asynchronous- merits and demerits:
  • Learning Management Systems. | Meaningful verbal expression
  Discussion |  |

| 6. To explore creative avenues of ICT in education |  |  |  |
7. To familiarize with content development process and platforms available
   • Learning Object Repository (LOR)
   • e-content features- concept and scope.
   • e-content development initiatives in India : NME-ICT, UGC-CEC

   Reflective sessions
   Online resources
   • Role performance analysis

   Narrative sessions
   Reflective practices
   Online resources
   • Participation in class activity
   • On task behaviour

8. To acquaint with the concept of virtual learning environment
   • Virtual tools :
     • Virtual learning Environment
     • Virtual Labs
     • Web applications for development of tests :
       • Hot potatoes
       • Online quiz maker

   Demonstration
   Discussion
   Techno lab activity
   • Participation in activity

9. To familiarize with the tools available for creation of tests

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

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To familiarize with computer safety on the net</td>
<td>• Computer virus- (malwares, spywares, trojan)- preventive measures- (Firewall, antivirus software)</td>
<td>Introductory lecture</td>
<td>Performance in techno lab activities</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Techno lab activities</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Peer tutoring</td>
<td></td>
</tr>
<tr>
<td>2. To create an awareness about personal safety on the net</td>
<td>• Cyber privacy and password protection</td>
<td>Demonstration</td>
<td>Participant observation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hands on experience</td>
<td>Skill assessment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Techno lab activities</td>
<td>Performance assessment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Peer tutoring</td>
<td></td>
</tr>
<tr>
<td>3. To familiarize with the legal and ethical issues</td>
<td>• Legal and ethical issues- Copyright, Plagiarism, Hacking, Netiquette, Phishing, Software privacy</td>
<td>e-resource demonstration</td>
<td>Participant observation</td>
</tr>
<tr>
<td>4. To develop a sense of intellectual property right</td>
<td></td>
<td>Group discussion</td>
<td>Performance in classroom discussion</td>
</tr>
</tbody>
</table>
5. To know about cyber laws
   Class discussion
   Printed media such as newspapers and magazines
   Home assignment
   ● Participation in class discussion
   ● Locating resources related to content
   ● Evaluating the assignment

6. To practice wise use of web resources
   ● 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
   ● Skill development assessment
   ● Participation in lab activities
   ● Evaluating assignments

Suggested Readings

Web Resources

- 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.e-learningconsulting.com/consulting/what/e-learning.html
- www.cemca.org/e-learning_guidebook.pdf
EDU- 04.1 : THEORETICAL BASE OF MALAYALAM 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

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To get familiarized with the functional plane of teaching and learning and the divergent roles expected to be played as a teacher</td>
<td>• Inter dependence of teaching and learning- class room, teacher, learner, teaching learning process, • Learning Environment, Learning activities, Learning Styles, Learning aids</td>
<td>Group discussion</td>
<td></td>
</tr>
</tbody>
</table>
UNIT 2: NATURE AND DEVELOPMENT OF MALAYALAM

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To understand the importance, nature and functions of Mother tongue</td>
<td>• Functions of Language</td>
<td>Assignments</td>
<td>• Assignment Paper,</td>
</tr>
<tr>
<td>2. To get familiarized with the evolution of Malayalam language</td>
<td>• Impact of language on social, intellectual, cultural, educational development</td>
<td>Debates</td>
<td>• Seminar presentation</td>
</tr>
<tr>
<td>3. To understand the relation between Malayalam and other language.</td>
<td>• Importance of Mother tongue - Mahatma Gandhi’s vision on the importance of Mother tongue,</td>
<td>Seminar/Symposium</td>
<td>• Test</td>
</tr>
<tr>
<td>4. To find out the relation between language and culture.</td>
<td>• Mother tongue and medium of instruction</td>
<td></td>
<td>• Participation in Debate &amp; Symposium</td>
</tr>
<tr>
<td></td>
<td>• Malayalam as an official language</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Mother tongue as a tool for preservation, transmission and transformation of culture</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
UNIT 3 AIMS AND OBJECTIVES OF TEACHING MALAYALAM

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
</table>
| 1. To get familiarized with the aims and objectives of teaching Malayalam, Taxonomy of educational objectives etc. | - 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 | Debate on recent changes practiced in the state schools  
Discussion on the relevance of Blooms Taxonomy | The extent of participation in debate/discussion etc. |

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

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
</table>
| 1. To understand the Methods, approaches, strategies, modern educational theories and concepts of teaching Malayalam language and literature | - 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 | Project  
Short essay  
Open discussion  
Comparative note  
Action research  
Seminar on the significance of new educational theories  
Assignment  
Preparation of | Project paper  
Essay  
Participation in discussion  
Action research findings  
Seminar paper and performance  
Assignment paper  
Prepared notes |
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 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

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To understand the meaning and practice pedagogic content knowledge analysis</td>
<td>• Meaning, features, and principles of pedagogic content knowledge analysis</td>
<td>Preparation of a comparative description on pedagogic content knowledge analysis of secondary/higher secondary level text books</td>
<td>• Student’s works</td>
</tr>
<tr>
<td>2. To get familiarized with the theory and practice of different language discourses</td>
<td>• Pedagogic content knowledge analysis of Secondary and Higher Secondary level text books</td>
<td>Preparation of discourse oriented activities for high school classes</td>
<td>• Prepared activities</td>
</tr>
<tr>
<td></td>
<td>• Discourse Oriented Pedagogy</td>
<td>Discussion on the suitability and adaptability of discourse oriented pedagogy</td>
<td>• Active Participation in discussion</td>
</tr>
<tr>
<td></td>
<td>• Importance of discourse in language learning and teaching</td>
<td>Preparation of discourse like narratives/travelogues/editorials/posters etc.</td>
<td>• Written documents</td>
</tr>
<tr>
<td></td>
<td>• The salient features of Discourse Oriented Pedagogy</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Functions of: Debate, Drama Seminars, Discussions, Diary, Posters, Narratives, Screen Play, Editorials, and Travelogues etc.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Process of constructing discourses</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
UNIT 2: PLANNING AND DESIGNING OF LESSON TEMPLATES

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
</table>
| 1. To understand the need and significance of instructional planning | • 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 | • Innovations in planning year plan/unit plan etc.  
• Originality of ideas/practices  
• In the workshop  
• Practical sessions in the classrooms  
• Appreciation sessions |
| 2. To get acquainted with the integration of new theories and concepts | | | |

UNIT 3: ESSENTIAL REQUIREMENTS OF TEACHING MALAYALAM

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
</table>
| 1. To understand, practice and master basic language skills, Communication skills etc. | • 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 | • Appropriateness of Practicum  
• Effectiveness of the test  
• Participation of students  
• Suitability of prepared lessons |
| | | | |

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<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
</table>
| 1. To understand the importance of resource materials for teaching and learning like text book, work book, hand book, dictionary etc. | • Text Book:  
• Characteristics of a good text book.  
• Resource Units and Workbooks  
• Teacher’s Handbook.  
• Periodicals, handouts, books etc.  
• Dictionaries, Thesaurus, Encyclopedias | Text book review  
Test paper  
Organization of a reading corner in | • Comprehensiveness  
• Student Participation  
• Versatility |
References: for all Semesters.

Prof. MK Prasad
Bhashapadanavum Bhodhana shastravum
Bhashapadanavum Sidhaanthangalum
Divaswapna
EnganeMalayalattilBlogam
Gadyarachana
Gadyashilpam
Kerala Panineeyam
KuttikalePadanathilSahayikkam
MalayalaBhashaBodhanam
MalayalaBhashadyapanam
MalayalaKavithapadhanamgal
MalayalaSahithyaCharithram
MalayalaSahithyaCharithram
MalayalaSahithyaNiroopanam
MalayalaSahithyaVimarschanam
Mathrubhashabhodhanam:
Micro teaching
MumbilullaJeevitham
Nalla Malayalam
NammudeBhasha
Padyapadhathi sidhaantham

Kerala Shaasthrasaahitya Parishad
Dr.SreeVrinda Nair N
GijubhaiBhadeka
Babaraj PM
CV VasudevaBhattathiri
AR RajarajaVarma
PK Abdul Hammed Karassery
CV VasudevaBhattathiri
Dr.KSivarajan
K Sachidanandan
Dr. KalpattaBlakrishnan
PK Parameswaran Nair
Dr. PanmanaRamachandran Nair
Dr. SukumarAzheekkode

Keral Bhasha Institute
Keral Bhasha Institute
Keral Bhasha Institute
Keral Bhasha Institute
Keral Bhasha Institute
Keral Bhasha Institute
Calicut University
Mthrubhoomi Books
Mthrubhoomi Books
Mthrubhoomi Books
Keral Bhasha Institute
Sahithya Academy
Current Books, Kottayam
DC Books, Kottayam

DC Books Kottayam
DC Books Kottayam
National Book Trust
DC Books, Kottayam
Keral Bhasha Institute
Keral Bhasha Institute
Keral Bhasha Institute
Keral Bhasha Institute
Keral Bhasha Institute
Adison Wesley, London
DC Books, Kottayam
DC Books, Kottayam
Keral Bhasha Institute
Keral Bhasha Institute
ParivarthanonmughaVidyabhyayasam
PravanathakalumReethikalum.
PrayogikaVyakaranam
PurogamanaVidyabhyasachinthakal
Thettillatta Malayalam
TirakkadhaRachana – KalayumSidhanthvum
Toto Chan
ShaasthrasaahityaParishad
Tuition to Intuition
Ucharanamnannavan
VidyabhyasathilViplavam
Vidyabhyasaasachinthakal
VidyabhyasaParivarthanattinoruAmugham
VyakaraMitham

Guru NityaachaithanyaYathi
Bindhu, C.M
Irinjyam Ravi
PV Purushothaman
Prof. PanmanaRamachandran Nair
Jose K Manuel
TetsukoKoriyoNagi
Dr. KN Anandan
Dr. VR Prabodhachandran
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.keralasahityyaakademi.org/
http://malayalambloghelp.blogspot.com/
http://www.topsite.com/best/malayalam
http://malayalam.kerala.gov.in/index.php
http://malayalaaiykavedi.blogspot.in/2015/04/blog-post_61.html
http://www.facebook.com/pages/628705850559130/ref=hl
http://bloghelpline.cyberjalakam.com/
http://blogsahayi.blogspot.in/

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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)

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Student teacher familiarizes with functional plane of teaching and learning and the divergent roles expected to be played as Language Teacher</td>
<td>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</td>
<td>Intro lectures on ELT in India Makes student recall qualities of teachers whom they admire/remember</td>
<td>Contribution in debate on need of English as an International Language Performance in classroom discussions regarding teacher role Entry recorded in Reflective</td>
</tr>
<tr>
<td>2. Grasps the current status of English in India and its</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
</table>
| 1. Gathers knowledge about meaning, nature and characteristics of language and select theories of language teaching and learning | • 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 | Brain storming  
Seminar  
Presentations  
Quiz  
Peer Tutorial  
Discussion  
Invited Talks | • Examine level of participation  
• Role performance analysis  
• Evaluation based on documentation |

Unit 2: Nature and Development of English Language (20 hrs)

- Three Language Formulae – Mother tongue Interference  
- English as a Link Language  
- Language teacher competencies-Roles and Responsibilities of English Teacher-mentor, facilitator, scaffold, reflective practitioner  
of lives of teachers who served as role models  
Views films related to teachers/ teaching  
Reads stories about lives of great teachers  
Web-based resources
### Unit 3: Aims and Objectives of Teaching English (20 hrs)

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
</table>
| 1. Develops an understanding of the principles of language teaching | • 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 | • 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)

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
</table>
| 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 | • 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 | • Evaluate the competence to compare and contrast  
• Monitor the ability to distinguish between similar concepts, phases |
References

- Reyes, Sharon Adelman. (et al.) Constructivist Strategies for Teaching English Language Learners. Corwin 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
- 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
- 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 I: Introduction to Pedagogic Content Knowledge (PCK) (25 hrs)

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Develops an understanding of pedagogy and its principles</td>
<td>Pedagogic Analysis Scope, Principles and Objectives</td>
<td>Direct instruction</td>
<td>Participation in task.</td>
</tr>
<tr>
<td>2. Familiarizes with Taxonomy of Educational Objectives</td>
<td>Pedagogic Content Knowledge Scope in teaching and learning</td>
<td>Engaging in Group discussion</td>
<td>Peer assessment of presentations</td>
</tr>
<tr>
<td>3. Develops an understanding of Objective-based Instruction</td>
<td></td>
<td>Individual and</td>
<td></td>
</tr>
<tr>
<td>Learning Outcome</td>
<td>Major Concepts</td>
<td>Strategies &amp; Approaches</td>
<td>Assessment</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------------</td>
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<td>---------------------------------------------------------------------------</td>
</tr>
<tr>
<td>1. Familiarizes the procedure and steps for planning different kinds of lesson.</td>
<td>Planning- Relevance, mode and Design-Year Plan-Unit Plan - Lesson Templates</td>
<td>Workshop mode to identify Objectives, Specifications and appropriate testing mechanisms</td>
<td>Ability to develop</td>
</tr>
<tr>
<td></td>
<td>Poetry- Appreciation, Deviant language of Poetry</td>
<td></td>
<td>Plan/</td>
</tr>
<tr>
<td></td>
<td>Grammar- Formal and Functional, Inductive and Deductive methods, Use of Substitution Tables</td>
<td></td>
<td>Teaching Manual for different content</td>
</tr>
<tr>
<td></td>
<td>Vocabulary - Content and Function words, Active and passive vocabulary, Techniques and Strategies for enriching vocabulary</td>
<td></td>
<td>Phased monitoring</td>
</tr>
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<td></td>
<td></td>
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<td>Performance in</td>
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<td></td>
<td></td>
<td></td>
<td>Workshop</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td>Checking ability to frame appropriate</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Objectives and Specifications</td>
</tr>
</tbody>
</table>

types of thinking
4. Familiarizes with the nature of a Course Book

Bloom’s Taxonomy: Specifications,
- 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.

collaborative tasks
Critique of different Course Books

Unit 2: Planning and design of lesson templates (25 hrs)
<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
</table>
| 1. Familiarizes with different teaching skills | • Analysis and Practice of Language Skills-LSRW-Identification and Practice of Language Elements-structure, vocabulary etc.  
• Core Skills of Teaching-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 | • 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)

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Familiarizes with ways of employing different aids for teaching different content</td>
<td>• Teaching aids- design and development&lt;br&gt;• Learning support resources&lt;br&gt;• Pictures&lt;br&gt;• Charts&lt;br&gt;• Flash Card&lt;br&gt;• Models&lt;br&gt;• Newspaper and Journals -Documentary&lt;br&gt;• Audio-Video Clips&lt;br&gt;• Interactive Board&lt;br&gt;• LCD Projector&lt;br&gt;• Internet&lt;br&gt;• Language Lab</td>
<td>Display of specimen aids&lt;br&gt;Guidance for preparation of aids for different content in workshop mode</td>
<td>• Peer comment&lt;br&gt;• Guided supervision</td>
</tr>
<tr>
<td>2. Explores ways of designing appropriate learning aids.</td>
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<td></td>
</tr>
</tbody>
</table>

### References

- *Cambridge Skills for Fluency* Series by Cambridge University Press.
- *Cambridge CAE Skills* Series by Cambridge University Press.

Online references
- Bloom’s Taxonomy: http://cft.vanderbilt.edu/guides-sub-pages/blooms-taxonomy/
- 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/
- 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)

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Student teachers acquaint with the importance and bases of language</td>
<td>• 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</td>
<td>Meaningful verbal presentation</td>
<td>• Case analysis presentation</td>
</tr>
<tr>
<td>2. Grasp the process of teaching-learning and gain an outlook of teaching profession</td>
<td></td>
<td>Brain storming</td>
<td>• Contribution in debate on qualities of teacher and Hindi as second language</td>
</tr>
<tr>
<td>3. Analyze learning environment for Hindi instruction</td>
<td></td>
<td>Makes student recall qualities of teachers whom they admire</td>
<td>• Performance in classroom discussions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Narration, anecdotes of lives of teachers</td>
<td></td>
</tr>
</tbody>
</table>
4. Adapt the changing structure of the concept of classroom instruction

- 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, scaffold, 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)

who served as role models
Views films related to teachers
<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Familiarize with the unique features of Hindi language</td>
<td>Special features and characteristics of Hindi language and its script Devanagiri lipi in standardized form (MANAK LIPI)—Hindi as national, official and link language</td>
<td>Discussion</td>
<td>Address the level of involvement in group discussions</td>
</tr>
<tr>
<td>2. Compete with communicating Hindi</td>
<td>Developing communicative competence</td>
<td>Meaningful verbal learning</td>
<td>Assessment of MANAKLIPI</td>
</tr>
<tr>
<td>4. Understand the scope, changes and developments of Hindi education</td>
<td>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</td>
<td>Open forum discussion</td>
<td>Prepare a brief sketch of NCF and KCF with special reference to language education</td>
</tr>
<tr>
<td>5. Equip to integrate essential interdisciplinary attributes in Hindi education</td>
<td>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</td>
<td>Co-operative learning</td>
<td>Use of web and Library resources</td>
</tr>
</tbody>
</table>
UNIT : 3    Aims and objectives of Teaching Hindi (18 Hrs + 7 Hrs)

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
</table>
| 1. Generate knowledge about the aims and objectives of teaching Hindi | - 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, Holistic Approach, Motivation in Learning, Brain Based Learning, Critical pedagogy, Issue Based Instruction | General discussion  
Demonstration  
Analytical study  
Group investigation  
Focus group discussion | • 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)

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Compete with different instructional methods suited for teaching Hindi</td>
<td>• 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</td>
<td>Dramatization Debate Role Play Buzz session Quiz session Problem solving method Project method Comparative &amp; critical study on various methods and approaches Learning through various discourses</td>
<td>Report presentation &amp; verification Monitor the ability to distinguish between similar concepts, phases</td>
</tr>
<tr>
<td>2. Become proficient in selecting most appropriate teaching methods, techniques and strategies in varied context and content</td>
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<tr>
<td>3. Familiarize with various forms of discourses for language learning</td>
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</tbody>
</table>
Collaborative learning strategies

- 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

References – for all Semesters.

- Acharya Chatsursen, Hindi Sahitya Ka Parichay
- Acharya Nandu Dulare BajPeyi, Hindi Sahitya 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 Aadharpabbooth Thatv
- Dr. Shailendra Bhooshan, 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 Nirdi
- 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 Padhathiym, 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, Mahendra Pal Sharma, Shiksha Ke Thatwik Sidhanth
- P. D. Patak, Shiksha Manovigyan, Agrawal Publications, Agra
- P. G. Kamath, Anya 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), New Delhi
- Kerala Curriculum Framework, SCERT, Thiruvananthapuram
- Report of Education Commission (Kothari Commission), Govt. of India
- Report of the Official Language Commission

**Online Resources:**
- http://www.teachingexpertise.com/articles/activities-for-developing-skills-1106
- http://www.topedusites.com/
- http://esl.fis.edu/teachers/support/teach.htm
- http://www.citejournal.org/articles/v9i1/general1.pdf
- 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)

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Understand the key aspects involved in systematic PCK analysis</td>
<td>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</td>
<td>Text book analysis Individual and Collaborative tasks Direct instruction Critique of different Course Books</td>
<td>Pedagogic Content Knowledge analysis presentation</td>
</tr>
<tr>
<td>2. Become capable of establishing relationship between pedagogic and content knowledge analysis</td>
<td>Scope and Challenges of PCKA in Knowledge generalization and transaction of Hindi</td>
<td></td>
<td>Text book analysis as individual/group work</td>
</tr>
<tr>
<td>3. Develop skill in PCK analysis of text books and hand books</td>
<td>PCK analysis of text books and hand books in Hindi of Std VII to std XII</td>
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</tr>
</tbody>
</table>
## Unit: 2 Instructional Planning and Designing Lesson Templates (16 Hrs + 6 Hrs)

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
</table>
| • Develop skills in systematic instructional planning and designing lesson templates | • 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 | Descriptive method  
Group discussion  
Demonstration method  
Co-operative learning  
Demonstration by experts  
Preparation of various Lesson Plan/Teaching Manual in small groups | • 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)

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
</table>
| 1. Develop teaching skills through micro teaching practices | • Essential requirements – Teaching Competencies and teaching skills  
• Micro Teaching- Definitions, Principle and | Experiential learning  
Reflective practices  
Demonstration | • Assessment of writing Micro teaching lesson notes/plans and schedule |
theory, micro teaching cycle, its limitations, designing lesson templates for Micro teaching
• 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

method
Analysis of video performance

- Reflection of video recording of own teaching
- Performance in skill presentation

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Understand the inevitable role of instructional support for effective instructional practices</td>
<td>• 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</td>
<td>Guided observation Illustration Demonstration General discussion Workshop Displays Demonstration</td>
<td>• Text book analysis • Workbook preparation • Handling of various instructional aids • Guided supervision</td>
</tr>
<tr>
<td>2. Generate skills in constructing and using different instructional aids and resources</td>
<td>• 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 multimedia • Scope of art education in teaching Hindi</td>
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<td></td>
</tr>
</tbody>
</table>
EDU – 04. 4 : THEORETICAL BASE OF SANSKRT 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]

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To develop perspectives on the study of Sanskrit in the global context.</td>
<td>• 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.</td>
<td>Meaningful Verbal expression. CAI Explanations and Narrative Demonstrations etc. Develop suitable environment for communication. Supply materials for loud reading. Comprehensions and paragraphs. Written competitions. Listening stories and poems, summarise and recite. Comparisons with the learning of English as second language, Malayalam as first language.</td>
<td>• -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.</td>
</tr>
<tr>
<td>2. To acquire theoretical knowledge and skills in the learning of Sanskrit language.</td>
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</tbody>
</table>
## UNIT II: NATURE AND DEVELOPMENT OF SANSKRIT LANGUAGE[12Hours+7Hours]

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To develop an understanding of the nature of language system and to understand the role and importance of Sanskrit and its cultural background.</td>
<td>- 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.</td>
<td>- Meaningful verbal expressions. Lecture cum discussions. Narrative expressions. Collection of Literature. Questionnaire to teachers and students. Lecture cum discussions.</td>
<td>• Role performance. • Individual assessment. • References. • Presentation of report and Participant observation. • Observations. • Analyze the performance-Power point presentation. • Participant observation- • CE-Practicum-10 marks.</td>
</tr>
<tr>
<td>2. To analyze and prepare a report on the learning of Sanskrit at school level.</td>
<td>- Problems related to Sanskrit teaching at School level.</td>
<td></td>
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</tr>
<tr>
<td>3. To familiarize with the psychological theories and its application of teaching Sanskrit.</td>
<td>- Psycho linguistic theories and its principles in teaching Sanskrit with special reference to</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learning Outcome</td>
<td>Major concepts</td>
<td>Strategies &amp; Approaches</td>
<td>Assessment</td>
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</tr>
<tr>
<td>2. To understand the aims and objectives of Sanskrit language teaching.</td>
<td>- 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.</td>
<td>CAI cum Discussion.</td>
<td>Participant observation.</td>
</tr>
<tr>
<td>3. To compare the curriculum of NCERT with SCERT.</td>
<td>- Comparison of the objectives and learning of Sanskrit in NCERT Curriculum with SCERT.</td>
<td>Lecture method and Collaborative learning- Assignment and Discussion.</td>
<td>Role performance.</td>
</tr>
</tbody>
</table>

**UNIT III AIMS AND OBJECTIVES OF TEACHING SANSKRIT [14HOURS+10HOURS]**
### UNIT IV METHODS AND STRATEGIES OF TEACHING SANSKRIT [20HOURS+7HOURS]

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
</table>
| 1. To understand about the methods and strategies of teaching Sanskrit and to understand the theoretical bases of major approaches. | • 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. | • 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, Hyderabad.
- An introduction to Language and Communication, Publisher Prentice Hall.
- Active Listoning building skills Marc Helgesen And Steven Brown Cambridge.
- 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.
• Modern trends in Educational technology, Romesh Varma, Suresh Sarma.
• Allen, d and Ryan, k (1969) Micro teaching, London, Adison Wesely, o
• Mathrubhasha bodanam p ravanathakalum reethikalum, Bindu, C.
• Taxonomy of Educational objectives, Blooms, B.S.
• Reflections on language - Chomsky, N (1975).
• Audio-visual methods in teaching, Dale 1961.
• Kerala Curriculum Frame work, SCERT Trivandrum.
• Practical Sanskrit grammar, PRD Sarma.
• Tarkasamgraha of Annambhatta.
• A Sanskrit grammar for students, A Macdovel.
• Kuvalayanandam – Appayyadikshitha.
• Vrettarethnakaram of Kedarabhatta.
• Sidhanthakaumudi of Bhattogideeshthar.
  - Laghusidhandakaumudi of Varadarajapandithan.
  - Rasa and Dvani, Dr. A. S. Sankaran.
  - Kavyaprakasa of Mammata.
• History of Sanskrit Literature, Keith.
• Sahityadarpanam, Visvanatha.
• Sabdabodini, A. R. Rajarajavarma.
• Vrethamanjary, Pingalamuni.
• Teaching Sanskrit with new techniques, Prof. Chalanarasima and Dr. Fathesingh, (1996)(2008).
• Sanskrit Nirukta, N.K. Rajagopal.
• The teaching of Sanskrit Prof. K. Ramavarma.
• The teaching of Sanskrit, Prof. G. Sahadevan.
• Laghusamskritam, Dr. K. G. Poulose.
• On teaching poetry – Haddon.
- Samsritadyapana-Visvanathasarma.
- Samskritasiksha Ramasuklapandya.
- The teaching of Sanskrit-D.G.Apte.
- Language in Education, Omkar N Koul.
- Sanskrit and ssscience, S.S. Janakikuppu.
- The problems of Sanskrit teaching-Huppanikkar.
- Samkritasahithyavimarsanam-Dr.NVP.Unnithiri.
- Keraleeya samskritadyapanavidya-Dr. K.R. Harinarayanan.
- AUDIO AND VIDEO REFERENCES.
- Abyasamanjary : 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 analysising 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]

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
</table>
| 1. To acquire knowledge in analysising the pedagogic and the linguistic content of Sanskrit Text Books. | • 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. | Presentation-  
Meaning full verbal expression-  
Group discussions.  
Presentation-  
-Presentation-  
Grammar Translation | • -Role performance-  
• Role performance-  
• Analyze and Participant observation  
• Observation.  
• Observation.  
• Role performance.  
• Subject associated activity—5Marks. |
• Analysis of Linguistic content [vocabulary, synonymous, Anonymous, Gender, Singular, Plural words, ideoms, and phrases]
• Grammar, Subanthas Thinganthes-Cases-Tenses-and moods [प्रकाराः]. Comparative study of Structure of sentences, in Hindi and Malayalam with Sanskrit.

### UNIT-II PLANNING AND DESIGNING OF LESSON TEMPLATES [20HOURS+12HOURS]

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
</table>
| 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]. | • 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- | Lecture cum discussion.-meaning full verbal expression group discussion – presentation – Document analysis and peer instruction – makes trainee recall the method of teaching – Presentation of model lesson plans. Discussion. | • 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] |
### UNIT III ESSENTIAL REQUIREMENTS FOR TEACHING OF SANSKRIT [16HOURS+6HOURS]

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
</table>
| 1. To develop essential skills in LSRW and core skills based on micro teaching. | • 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. | Lecture method demonstration and practice.  
Group discussion-observations-presentation – narrative expression session in small groups –  
Makes trainee recall the art of teaching – use film related teaching skills ,web based resources – Individual Performance. Recording. | • 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]

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To appreciate the use of audio-visual aids, ICT, internet and Technology.</td>
<td>• 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.</td>
<td>Lecturing and Demonstration of teaching aids. Discussion. Group activities. Preparation of learning aids in workshops. Demonstration and observation of Language lab. Preparation and practice of lesson plans based on ICT, internet, and different audio –visual aids.</td>
<td>• 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.</td>
</tr>
</tbody>
</table>
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 of 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

Contents

UNIT I: 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

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
</table>
| 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 | - Language Learning: Perspectives  
- Teaching and Learning: its Nature and significance  
- Maxims of Teaching  
- Learner and Teacher  
- Interdependence 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 | CE  
Assignments  
TE |

### UNIT II: Nature and Development of Arabic Language

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
</table>
| 1. The Student Teacher will be able to acquaint with the meaning, nature and characteristics of Arabic Language | - Language: Meaning, definitions  
- Characteristics and functions  
- Language and Culture  
- Basic Concepts: Morphology, Phonology, Syntax, semantics  
- First Language, Second Language & Foreign | Lecture  
Discussion  
Debate  
Seminar | CE  
Assignments  
SEM Seminar reports  
TE |
| 3. To develop Knowledge of acquisition of basic language skills | language  
- 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 | Brainstorming |
### UNIT III: AIMS AND OBJECTIVES OF TEACHING ARABIC LANGUAGE

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
</table>
| 1. The student teacher will be able to acquaint with the aims and objectives of Arabic language teaching | • 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 | • CE  
• Assignments/  
• Project  
• TE |

### UNIT IV: METHODS AND STRATEGIES OF TEACHING ARABIC LANGUAGE

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
</table>
| 1. The student teacher will be able to develop the ability to apply theories related to Language teaching | • Application of Psychological Principles:  
• Behaviourism, Cognitivism,Constructivism, Social constructivism, Chomskyan Concept (LAD & Universal Grammar), Krashen’s Hypothesis  
• Approaches, Methods & Techniques  
• Traditional and Modern Methods: | • Introductory Lecture  
• Discussion  
• Demonstration  
• Debate  
• Video lesson observation  
• Online reference | • CE  
• Assignments  
• TE |
<table>
<thead>
<tr>
<th>Most suitable methods, Approaches, strategies and techniques in Arabic language teaching and learning</th>
<th>Approaches/Methods of teaching Language elements:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Role play, Dramatization, Narrative strategies, Discourse based language learning, Learning by doing, Activity Based Teaching and Learning</td>
<td></td>
</tr>
<tr>
<td>Approaches, Methods &amp; Techniques of teaching Language skills:</td>
<td></td>
</tr>
<tr>
<td>• Listening Skill, Speaking skill developing, Speaking &amp; Listening Skills, Causes of bad pronunciation, Techniques of teaching good pronunciation</td>
<td></td>
</tr>
<tr>
<td>Methods and techniques of teaching Reading skill</td>
<td></td>
</tr>
<tr>
<td>Methods and techniques of teaching Writing skill: Dictation, Creative writing, Editing Process</td>
<td></td>
</tr>
<tr>
<td>Critical Evaluation of the Methods of Teaching</td>
<td></td>
</tr>
</tbody>
</table>

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
• Thatweru Adai -al Muallim; kifayathu thaaleem wa thahleel al muthawasila : Hashim Uwaidha, Dar al Ilm al Malayeen, Labanan
• Thareeqathu Thadreesi Wa strateejiyyathuhu: Dr Muhammed Mahmmod al Haila, Dar Al Kitab Al Jamia, Al ain, UAE
• Al Mawajjah Al Fanni LiMudarirseel al Lughal Al Arabiya: 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 lli qaria al Arabi: Dr. Mahmood Al Saaran, Dar al- N ahda al Arabiya
• Thuruqu thadrees al lugha al Arabiya 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 Tharbaya, Dar Hammurabi llnashri wa thouzeea
• Asaleeb Wa Thuruqu al-Thadrees al Hadeesa : Dr. Muhammed Assam Tharbaya; Dar Hammurabi llnashri wa thouzeea
• Providing teachers effective strategies for using technology techtrends: Brown B& Henscheid
• The systematic Design for Instruction: Dick, W& L(1990)
• Istheeratheejiyyath wa Maharah al Tharees : Kamal al Jundi; Dar al Jumhooriya liilthibaa
• Wasaail al Ithisal wa thaknologiya 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 Asaleebuhi Thaqweemu Nathaijahu wa Thathbeeqathuhu: Dr Fikri Hasan Rayan, Aalm al kutub, al qahira
• Madkhal Ila Tharbiya al muthamayyizeena wal Mauhoobeen, Dar al fikar liaal thibaa wa Nashr
• Thaqniyyath al thaaleemi Mafhoomuha wa douruha fi thanseeni amaliyyath al thaaleem wa thaallum: Badar Salih
• Al tharbiya wa thuruqu thadrees: Salih abdul Azeez& Abdul Azeez Abdul Majeed; Dar al Maarif, Al Qahira
• Al Muwajjah al Amali li Mudarirseel al Lughal Al Arabiya: Abid Thoufeeq al Hashmi; Al Risala publishing House, Bairut
• Kaifa Thulqi Darsak: Yabhasu fi usooli al tharbiyath wa thadrees, Dar al Ilm lil Malayeen, Bairut.
EDU. 05.5 : PEDAGOGIC CONTENT KNOWLEDGE ANALYSIS-ARABIC.

(Theoretical Discourses. 60 hours 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 PEDAGOGIC 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):

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The student teacher will be able to develop an understanding of pedagogic content knowledge Analysis</td>
<td>Content Knowledge and Pedagogic Knowledge</td>
<td>Introductory Lecture Discussion Group Discussion</td>
<td>CE</td>
</tr>
<tr>
<td>2. Familiarizes with the nature of text book and analyses pedagogically</td>
<td>Pedagogic Content Knowledge</td>
<td></td>
<td>Assignments/ project</td>
</tr>
<tr>
<td></td>
<td>Pedagogic Content Knowledge analysis: scope, principles and objectives</td>
<td></td>
<td>TE</td>
</tr>
<tr>
<td></td>
<td>Steps involved in pedagogic content knowledge analysis</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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UNIT II: Planning and Designing of Lesson Templates

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Develop knowledge of the importance of planning in teaching</td>
<td>• Planning in Teaching: Importance of planning in teaching</td>
<td>• Introductory Lecture</td>
<td>CE</td>
</tr>
<tr>
<td>2. Acquire the ability and skills to plan lessons and use in classroom teaching</td>
<td>• Objectives of Planning Different levels of Planning: Year plan, Unit plan, lesson plan</td>
<td>• Discussion</td>
<td>Assignments/</td>
</tr>
<tr>
<td>3. Develop the ability to design lesson plans incorporating the relevant objectives and activities</td>
<td>• Planning and designing of lesson templates</td>
<td>• Group Discussion</td>
<td>project</td>
</tr>
<tr>
<td></td>
<td>• Steps involved in preparing lesson template</td>
<td>• Observation</td>
<td>TE</td>
</tr>
<tr>
<td></td>
<td>• Designing lesson templates for different language discourses &amp; language elements</td>
<td>• Narration</td>
<td></td>
</tr>
</tbody>
</table>

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
### UNIT III: ESSENTIAL REQUIREMENTS OF TEACHING ARABIC LANGUAGE

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
</table>
| 1. Familiarizes with ways of employing teaching skills for effective teaching | • 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 | • CE  
• Assignments  
• TE |
| 2. Practice teaching skills | | | |
| 3. And apply it effectively | | | |

### UNIT IV: RESOURCES IN TEACHING AND LEARNING OF ARABIC LANGUAGE

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
</table>
| 1. Familiarizes with ways of developing different teaching aids and applying in classroom teaching | • 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 | • CE  
• Workshop products  
• Observation  
• Reports  
• collections  
• TE |
| 2. Acquire the ability to apply suitable Teaching Aids in classroom teaching | | | |
- Activity Aids: Jamaiyathul Arabiyya al adabiyya, nadiyathu lluga, majallathul arabiyya wa 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.

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
- Thuruq thadrees al lugha al Arabiya lil madaris al muthawassitha wa thanalyya : Hasan Mulla Uthman ; Dar al- Kuthub lithbaa wa nnashshr wa thouzeea, Riyadh, KSA
- Thaaleemu al lugha al arabiya baina nadriyya wa thathbeeq: Dr Hasan Al Shahatha, Dar Misriyya wa llubnaniya
- Mushkilathu thaaleemu llughal Arbiyya: Abbas Mahmood ; Dar alsaqafa, Qatar
- Thareeqathu Thadreesi Wa strateejyyathuhu: Dr Muhammed Mahnmod al Haila, Dar Al Kitab Al Jamia, Al ain, UAE
- Al Mawajj Al Fanni LiMudarirsee al Lughal Al Arabiya: Abdul Aleem Ibrahim; Dar al maarif, Al qahira
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- Ilmu al lugha; Muqadhima lil qaria al Arabi: Dr. Mahmood Al Saaran, Dar al- N ahda al Arabiya
- Thaqnolojiya al Thaaleem; Al wasail al thaaleemiyiya wa thaqniyyath al thaaluum: Dr. Muhammed Assam Tharbay , Dar Hammurabi ilnashri wa thouzeea
- Asaleeb Wa Thuruq al-Thadrees al Hadeesaa : Dr. Muhammed Assam Tharbaya; Dar Hammurabi ilnashri wa thouzeea
- Providing teachers effective strategies for using technology techtrends: Brown B& Henscheid
- Istheeratheejyyath wa Maharah al Tharees :Kamal al Jundi; Dar al Jumhooriya liltibaa
- Wasaail al Ithisal wa thaknologiya 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 Thaqweemu Nathaijhu wa Thathbeeqathuhu: Dr Fikri Hasan Rayan, Aalm al kutub , al qahira
• Madkhal Ila Tharbiya al muthamayyyizeena wal Mauhoobeen, Dar al fikar lial thibaa wa Nashr
• Thaqniyyath al thaaleem( Mafhoomuha wa douruha fi thahseeni amaliyyath al thaaleem wa thaallum: Badar Salih
• Kuthub al Mudariseen lil madaris al thanawiyya: Majli al wilaya liilbuhuzu thabaviyya wathadreeb
• Al tharbiya wa thuruqu thadrees: Salih abdul Azeez& Abdul Azeez 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 Mudarrisee al Lughal Arabiya: Abid Thoufieeq al Hashmi; Al Risala publishing House, Bairoot
• 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

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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.
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)

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Student teacher familiarizes with functional plane of teaching and learning and the divergent roles expected to be played as Language Teacher</td>
<td>Perspectives of Tamil Studies</td>
<td>Makes student recall qualities of teachers whom they admire/remember</td>
<td>Contribution in debate on need of Tamil as an Classical Language</td>
</tr>
<tr>
<td></td>
<td>Significance in the Global context</td>
<td>Narration, anecdotes of lives of teachers who served as role models</td>
<td>Performance in classroom discussions regarding teacher role</td>
</tr>
<tr>
<td></td>
<td>Tamil – Classical Language</td>
<td>Views films related to</td>
<td>Entry recorded in Reflective journal</td>
</tr>
<tr>
<td></td>
<td>Tamil as a skill subject</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Teaching Tamil as a First Language [L1]</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Second Language [L2] and Third Language [L3]</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bilingualism</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Three Language Formulae – Mother tongue Interference</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Tamil as a Link Language
- Language teacher competencies
- Roles and Responsibilities of Tamil Teacher-mentor, facilitator, scaffold, reflective practitioner

<table>
<thead>
<tr>
<th>teachers/teaching</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reads stories about lives of great teachers</td>
</tr>
<tr>
<td>Web-based resources</td>
</tr>
</tbody>
</table>

**Unit 2: Nature and Development of Tamil Language (20 hours)**

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
</table>
| 1. Gathers knowledge about meaning, nature and characteristics of language and select theories of language teaching and learning | - Language and culture, Language and society, Language and media (print and digital)  
- Behaviourism- imitation, repetition, reinforcement  
- Multiple Intelligence | Brain storming  
Seminar Presentations  
Quiz  
Peer Tutorial Discussion  
Invited Talks | - Examine level of participation  
- Role performance analysis  
- Evaluation based on documentation |
### Unit 3: Aims and Objectives of Teaching Tamil (20 hours)

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Develops an understanding of the principles of language teaching</td>
<td>• Utilitarian aim, Socio-cultural aims&lt;br&gt; • -Objectives of Teaching Tamil&lt;br&gt; • -Principles of Language Learning&lt;br&gt; • -Ideology of teaching Tamil in classrooms; Addressing learner sensibilities and learner abilities in language learning; Developing communicative competence</td>
<td>Brain storming&lt;br&gt; Quiz&lt;br&gt; Discussion&lt;br&gt; Assigned readings from the works of theorists&lt;br&gt; Group discussion</td>
<td>• Examine level of participation&lt;br&gt; • Evaluation based on documentation&lt;br&gt; • Examine student report&lt;br&gt; • Address the level of pupil involvement in Group Discussion</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Familiarizes with traditional approaches and methods of language teaching&lt;br&gt; 2. Updates Knowledge of current approaches and methods&lt;br&gt; 3. Develops the ability to choose the most suitable method for a given content or group of learners</td>
<td>• Approach, Method, Technique&lt;br&gt; • Teaching Methods –Grammar, Prose, Poetry&lt;br&gt; • Student Centered Method and Teacher Centered Method&lt;br&gt; • Inductive and Deductive Method</td>
<td>Demonstration of steps followed in different methods&lt;br&gt; Watching video recordings&lt;br&gt; Accessing Online input on the topic&lt;br&gt; Co-relating class room activities</td>
<td>• Evaluate the competence to compare and contrast&lt;br&gt; • Monitor the ability to distinguish between similar concepts, phases</td>
</tr>
</tbody>
</table>
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
- Nathan, Meenakshi et al., Tamil Grammar of std VIII & IX (SCERT)
- Tamil Nadu Text Book society Publication, Tamil Grammar for std VIII & X
- Nannool Kaandikai Urai Pavanantham Pilla Commentary
- VisakaperimaiP, Annai Ilakkanaram. Saiva Sithandam Publication
- Iyengar, Ragava M. Porulathikara Arachichi
- Muthishanmugal, Thekkaiamothyiyai,
- Raja Ram, Tamil Phonetic Reader, Central Institute of Languages, Mysore
- Paranthamanar, A. Nalla Tamil Ezhuthu Karuthum
- Veluppillai, 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. Palilutu Paiurchium, Mozchiaciriay-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.

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develops an understanding of pedagogy and its principles</td>
<td>Pedagogic Analysis - Scope, Principles and Objectives</td>
<td>Direct instruction</td>
<td>Participation in task.</td>
</tr>
<tr>
<td>Familiarizes with Taxonomy of Educational Objectives</td>
<td>Pedagogic Content Knowledge- Scope in teaching and learning</td>
<td>Engaging in Group discussion</td>
<td>Peer</td>
</tr>
<tr>
<td>Develops an understanding of types of thinking</td>
<td>-Objective-based Instruction - Bloom’s Taxonomy: Specifications,</td>
<td>Individual and collaborative tasks</td>
<td>assessment of presentations</td>
</tr>
<tr>
<td>Familiarizes with the nature of a Course Book</td>
<td>-Process skills &amp; Thinking Skills (Critical</td>
<td>Critique of different</td>
<td></td>
</tr>
</tbody>
</table>

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and Creative), Problem Solving
• 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.

<table>
<thead>
<tr>
<th>Course Books</th>
</tr>
</thead>
</table>

**Unit 2: Planning and design of lesson templates (25 hours)**

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Familiarizes the procedure and steps for planning different kinds of lesson.</td>
<td>Planning- Relevance, mode and Design-Year Plan-Unit Plan - Lesson Templates</td>
<td>Workshop mode to identify Objectives, Specifications and appropriate testing mechanisms</td>
<td>• Ability to develop suitable Lesson</td>
</tr>
</tbody>
</table>
## Unit 3: Essential requirements for teaching of Tamil (20 hours)

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
</table>
| 1. Familiarizes with different teaching skills | • Analysis and Practice of Language Skills- LSRW Identification and Practice of Language Elements - structure, vocabulary etc.  
• Core Skills of Teaching-  
  - 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 | • 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)

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Familiarizes with ways of employing different aids for teaching different content</td>
<td>• Teaching aids- design and development -Learning support resources -Pictures-Charts-Flash Card-Models- Newspaper and Journals-Documentary ● Audio-Video Clips-Interactive Board-LCD Projector-Internet-Language Lab</td>
<td>• Display of specimen aids Guidance for preparation of aids for different content in workshop mode</td>
<td>• Peer comment • Guided supervision</td>
</tr>
</tbody>
</table>
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)

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To understand the various roles of Mathematics teacher</td>
<td><strong>Teacher</strong></td>
<td>• Meaningful Verbal</td>
<td>• Performance assessment in group discussion</td>
</tr>
<tr>
<td>2. To familiarize and develop general and specific competencies</td>
<td>• Role-*Knowledge manager</td>
<td>• Explanation</td>
<td>• Tests</td>
</tr>
<tr>
<td>3. To generate a knowledge of phases of teaching</td>
<td>• Facilitator</td>
<td>• Group Discussion</td>
<td>• Peer evaluation</td>
</tr>
<tr>
<td>4. To understand the qualities of a good mathematics teacher</td>
<td>• Scaffolder</td>
<td>• Peer tutoring</td>
<td>• Evaluation of assignments</td>
</tr>
<tr>
<td>5. To acquaint with the concept of classroom without walls</td>
<td>• Mentor</td>
<td>• Power point</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Social Engineer</td>
<td>• presentation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Reflective practitioner</td>
<td>• Assignments</td>
<td></td>
</tr>
</tbody>
</table>
- 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)

### Unit II: Nature, Scope and Development of Mathematics (13 hours)

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To familiarize with various definitions of Mathematics</td>
<td><strong>Meaning and Definition of Mathematics</strong></td>
<td>Meaningful Verbal Explanation</td>
<td>Analysis of students</td>
</tr>
<tr>
<td>2. To understand the nature and scope and characteristics of Mathematics</td>
<td>Nature and scope of Mathematics</td>
<td>Group Discussion</td>
<td>Performance</td>
</tr>
<tr>
<td>3. To acquaint with development of Mathematics</td>
<td>Characteristics of Mathematics</td>
<td>Peer</td>
<td>_Peer Evaluation</td>
</tr>
<tr>
<td>4. To inquire into the Contributions of great Mathematicians</td>
<td>Language of Mathematics</td>
<td>tutoring</td>
<td>_Poster</td>
</tr>
<tr>
<td>5. To understand the values of learning Mathematics</td>
<td>Role intuition inductive and inductive reasoning</td>
<td>reflective dairy</td>
<td>Presentation</td>
</tr>
<tr>
<td>6. To identify different types of correlation of Mathematics</td>
<td><strong>Development of Mathematics</strong></td>
<td>Collaborative Interaction and Role Play</td>
<td>Evaluation of</td>
</tr>
<tr>
<td></td>
<td>Human needs as the basis of growth of Mathematics as a structured science: undefined terms, postulates, axioms and theorems</td>
<td>Power point presentation</td>
<td>reflective dairy</td>
</tr>
<tr>
<td></td>
<td>pure and applied mathematics</td>
<td>Assignments</td>
<td>Questioning</td>
</tr>
<tr>
<td></td>
<td>Euclidian and non-Euclidean Geometry</td>
<td>Brain storming</td>
<td>Class tests</td>
</tr>
<tr>
<td></td>
<td><strong>Contributions of great Mathematicians</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Pythagoras, -Rene Descartes, -C.F.Gauss, Aryabhata, Bhaskaracharya, Brahmagupta, and Sreenivasa Ramanujam</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Values of learning Mathematics:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learning Outcome</td>
<td>Major concepts</td>
<td>Strategies &amp; Approaches</td>
<td>Assessment</td>
</tr>
<tr>
<td>------------------</td>
<td>--------------------------------------------------------------------------------</td>
<td>-----------------------------------------------</td>
<td>----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>1.</td>
<td>To understand the aims and objectives of teaching mathematics</td>
<td>Meaningful verbal presentation</td>
<td>• Performance analysis in group discussions</td>
</tr>
<tr>
<td>2.</td>
<td>To introduce the Blooms taxonomy of educational objectives under three domains</td>
<td>Power presentations</td>
<td>• Observation</td>
</tr>
<tr>
<td>3.</td>
<td>To familiarize with the revised version of Bloom’s taxonomy of educational</td>
<td>Illustrations</td>
<td>• Participation in the Seminar sessions</td>
</tr>
<tr>
<td></td>
<td>objectives</td>
<td>Seminars</td>
<td>• Examples cited in their lecture note</td>
</tr>
<tr>
<td>4.</td>
<td>To compare and contrast the objectives of teaching mathematics listed in NCF</td>
<td>Role play</td>
<td>• Questioning</td>
</tr>
<tr>
<td></td>
<td>and KCF</td>
<td>Collaborative and Cooperative learning</td>
<td>• Summative evaluation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>strategies</td>
<td>• Participation in the Seminar sessions</td>
</tr>
</tbody>
</table>

Unit III: Aims and Objectives of Teaching Mathematics (20 hours)

- Utilitarian, Disciplinary, Cultural, Aesthetic, Social, Moral, International etc.
- Correlation of Mathematics with life, other subjects and different branches of the same subject

<table>
<thead>
<tr>
<th>Group discussions</th>
<th>Seminar</th>
</tr>
</thead>
</table>

- Group discussions
- Seminar

Learning Outcome

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

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To understand various methods and approaches, useful for effective transaction of mathematics</td>
<td><strong>Methods and approaches</strong>&lt;br&gt;Procedure, merits &amp; demerits of:&lt;br&gt;• Lecture method&lt;br&gt;• Inductive Deductive method&lt;br&gt;• Analytic -Synthetic method&lt;br&gt;• Laboratory method&lt;br&gt;• Project method&lt;br&gt;• Problem solving method&lt;br&gt;• Heuristic approach&lt;br&gt;• Concept of Questioning, Features of good questions and Good questioning</td>
<td>Group discussions&lt;br&gt;Role play&lt;br&gt;Meaningful verbal presentation&lt;br&gt;Collaborative and Cooperative learning Strategies&lt;br&gt;Power point presentations</td>
<td>• Participant observation&lt;br&gt;• Performance assessment in classroom activities&lt;br&gt;• Individual work and in Group work.&lt;br&gt;• Summative evaluation</td>
</tr>
<tr>
<td>2. To familiarize with various techniques useful for individualizing Mathematics instruction</td>
<td><strong>Techniques for individualizing instruction</strong>&lt;br&gt;• Assignments&lt;br&gt;• Homogeneous grouping&lt;br&gt;• Supervised study&lt;br&gt;• Drill work&lt;br&gt;• Dalton plan</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

References:

- 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.)
• Kilpatrick, W. H. (1918). The project method. Teachers College Record, 19, 319-335.
• Soman, K. Ganitha sasthra bodhanam. Thiruvananthapuram: Kerala Bhasha Institute.
EDU 05.7: PEDAGOGIC CONTENT KNOWLEDGE ANALYSIS: MATHEMATICS

(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)**

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
</table>
| 1. To provide knowledge on Pedagogic Analysis | • 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 | • Performance analysis in group discussions  
• Observation  
• Participation in the Seminar sessions  
• Assessment of assignment |
### Unit II: Planning and Designing of Lesson Templates (25 hours)

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
</table>
| 1. To understand need, importance and stages of planning instructions in mathematics | 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  
Learning session, Group discussion  
Reviewing previous lesson plans | _Questioning_  
_Performance analysis in group discussions_  
Assessment of practical records  
on Discussion, demonstration, criticism lessons.  
Practicals  
Discussion lessons  
Observation of video lessons  
on Demonstration lessons |
| 2. To develop the ability to plan and design year, unit and lesson plans | Arithmetical and Geometric Skills  
Drawing and interpreting graphs and charts  
HOT skills  
Teaching Skills | | |

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

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
</table>
| 1. To understand the basic skills needed for effective teaching and develop the ability to make use of teaching skills by the practice of microteaching | 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 | Assessment of reflective diary  
Performance analysis while practising Microteaching skill  
Discussions  
Observation  
Practicals |
2. To understand and practice digital skills.

- **Microteaching Skills** (set induction, questioning, reinforcement, stimulus variation, using black board, explanation etc)
- Microteaching lessons- Planning and preparation of
  o Microteaching lesson plans
  - Practicing Microteaching skills
- **Digital skills**
  - Identify and practice digital skills for teaching

<table>
<thead>
<tr>
<th>Brain storming</th>
<th>Illustration of skills</th>
<th>Simulation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Video</td>
<td>Video clips/video lessons</td>
</tr>
</tbody>
</table>

**Unit IV: Resources in Teaching and Learning Mathematics (10 hours)**

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To understand different methods for concretizing abstract ideas</td>
<td>concretization of abstract ideas in mathematics,</td>
<td>Meaningful verbal presentation</td>
<td>_ Performance analysis in individual and in group</td>
</tr>
<tr>
<td>2. To understand the need, importance and different types of learning aids in mathematics</td>
<td>Different types of learning aids, Improvised aids, modern learning supporting gadgets like PPT, Interactive White Board etc</td>
<td>Group activities, Sessions in small or medium groups, Video clippings, You tube resource tapping, Drill and Practice, Lab sessions</td>
<td>_ Discussions/tasks, _ Questioning, _ Practical tests</td>
</tr>
</tbody>
</table>
References:

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)

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To acquaint student teachers with the process of teaching learning in the changing scenario</td>
<td>Teaching - phases, maxims of teaching.</td>
<td>Meaningful verbal expression</td>
<td>Analysis in group discussion</td>
</tr>
<tr>
<td>2. To familiarize with the maxims of teaching</td>
<td>Learning - definitions based on behaviourism, cognitivism and constructivism.</td>
<td>Group discussion</td>
<td>Participant observation</td>
</tr>
<tr>
<td>3. To understand the concept of learning given by behaviourists, cognitivists and constructivists</td>
<td>Interdependence of teaching and learning.</td>
<td>Narrative expression sessions in small or medium groups</td>
<td>Debate</td>
</tr>
<tr>
<td>4. To familiarize with the changing classroom environment</td>
<td>Basic teaching model of Glaser.</td>
<td>Seminar</td>
<td>Reflective journal</td>
</tr>
<tr>
<td>5. To develop understanding in Continuing Professional</td>
<td>Changing concept of classroom environment.</td>
<td></td>
<td>Tests</td>
</tr>
<tr>
<td></td>
<td>Science teacher - qualities, duties and responsibilities.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Multiple roles of teacher - Teacher as a leader, knowledge worker, facilitator, supervisor, mentor, scaffold, social</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Unit 2: Nature and Development of Science Education (10+5=15 hours)

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To understand the nature and scope of science</td>
<td>• Nature of science-science as a product, process)</td>
<td>Group discussion</td>
<td>• Document analysis</td>
</tr>
<tr>
<td>2. To familiarize with the evolution of scientific achievements.</td>
<td>• Scope of science-Values (intellectual, social, practical, disciplinary, recreational, moral, aesthetic)</td>
<td>Seminar</td>
<td>• Posters</td>
</tr>
<tr>
<td>3. To identify and highlight the contributions of scientists in India and abroad</td>
<td>• Development of science in ancient, medieval and modern periods.</td>
<td>Personality profile presentation</td>
<td>• Online assessment</td>
</tr>
<tr>
<td>4. To appreciate the contributions given by the Indian women scientists</td>
<td>• 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</td>
<td>Creative blog</td>
<td>• Quiz programme</td>
</tr>
<tr>
<td>5. To familiarize with the evolution of teaching of science</td>
<td>• Evolution of science education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. To identify the role of science for sustainable development</td>
<td>• Emerging branches in science- Nanotechnology, Bioinformatics, information Technology, Geoinformatics</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Science for sustainable development</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Unit 3: Aims and Objectives of Teaching Physical Science (20+4=24 hours)

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To acquaint with the aims and objectives of teaching physical science</td>
<td>• Aims and Objectives of teaching physical science&lt;br&gt;• Scientific attitude&lt;br&gt;• Objective based instruction- Instructional objectives, Specific objectives, learning experience, Evaluation&lt;br&gt;• Taxonomy:Bloom's Taxonomy,1956.&lt;br&gt;• Revised Bloom's Taxonomy(Anderson and Krawthwohl),1990.&lt;br&gt;• Mc Cormack and Yager Taxonomy of Science Education,1989 - Process skills.&lt;br&gt;• Technology Integrated Taxonomy, Peck and Wilson,1999.&lt;br&gt;• Aims and Objectives of teaching Physical science with respect to NCF(2005), KCF(2007)</td>
<td>• Meaningful verbal expression&lt;br&gt;• Narrative expression sessions in small or medium groups&lt;br&gt;• Seminar&lt;br&gt;• Digital presentation&lt;br&gt;• Blog searching&lt;br&gt;• Reflective practices&lt;br&gt;• Peer tutoring</td>
<td>• Questioning&lt;br&gt;• Participation in group discussions&lt;br&gt;• Participant observation&lt;br&gt;• Tests&lt;br&gt;• Blog posting</td>
</tr>
</tbody>
</table>
## Unit 4: Methods and Strategies in Physical Science Teaching (20+6=26 hours)

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
</table>

### Reference
• Mariamma Mathew (2014): Teaching science for biological and physical sciences: NAS Publishers: Kerala
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)

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
</table>
| 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. | - 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 | - Analysis in group discussion  
- Assessment of optional notebook entries  
- Open forum  
- Peer evaluation |
### Unit 2: Planning and Designing of Lesson Templates (20+15=35 hours)

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To acquaint with the planning of instruction</td>
<td>Planning- Need and Importance.</td>
<td>Meaningful verbal expression</td>
<td>Performance assessment in group discussion</td>
</tr>
<tr>
<td>2. To develop understanding of different types of planning</td>
<td>Different types of planning- Purposes and steps-Year Plan, Unit Plan, Resource Unit, Lesson Plan- Herbartian steps Behaviourist and Constructivist formats</td>
<td>Group discussion</td>
<td>Assessment of optional notebook entries</td>
</tr>
<tr>
<td>3. To design lesson templates based on different formats</td>
<td></td>
<td>Explicit teaching</td>
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<td></td>
<td></td>
<td>Peer tutoring</td>
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</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To identify competencies required for a teacher to be professional.</td>
<td>Teacher Competencies-Subject competencies, Pedagogical competencies, Technological competencies.</td>
<td>Meaningful verbal expression</td>
<td>Analysis in group discussion</td>
</tr>
<tr>
<td>2. To develop understanding of various teaching skills</td>
<td>Teaching skills</td>
<td>Group discussion</td>
<td>Lesson segment preparation</td>
</tr>
<tr>
<td>3. To understand microteaching and its relevance in the development of teaching skills</td>
<td>Microteaching - Definitions and meaning, principles, steps, microteaching cycle</td>
<td>Document analysis and Peer evaluation</td>
<td>Observation schedule designing</td>
</tr>
<tr>
<td>4. To design, practice and document micro lessons in physical science</td>
<td>Development of selected teaching skills- Set induction, Reinforcement, Explaining, Illustrating with examples, Probing questions, Using chalk board, Stimulus</td>
<td>Video observation Reflective practices</td>
<td>Think, Pair and Share sessions</td>
</tr>
</tbody>
</table>
### Unit 4: Resources in Teaching and Learning of Physical Science (15+10=35 hours)

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
</table>
| 1. To understand the importance of learning aids and improvised aids in learning Physical Science | - Learning aids and improvised aids-Importance in science learning  
- Text book- Qualities, Vogel's Criteria, Fog Index  
- Resource Mapping | Narrative expression sessions in small or medium groups  
Document analysis  
You tube resource tapping  
Drill and Practice  
Lab sessions | - Participant observation  
- Analysis in group discussion  
- Class test  
- Material Development Circles |
| 2. To acquire hands-on experience in designing and developing suitable learning aids for classroom instruction | | | |
| 3. To develop understanding in resource mapping | | | |

### Reference
- Alan J. McCormack. Trends and Issues in Science curriculum in Science Curriculum
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)

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To understand classroom as an organization</td>
<td>1.1 Classroom as an organization - Teacher and Learner, Definitions of learning from different point of view (behavioristic, cognitive and constructivist),</td>
<td>Group discussion.</td>
<td>Participation in group discussion.</td>
</tr>
<tr>
<td>2. To acquaint student teachers with the process of teaching learning in the changing scenario.</td>
<td>Teaching-Learning process, Maxims of teaching.</td>
<td>Narrative expression sessions in small or medium groups.</td>
<td>Questioning.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>On-task behavior in class.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Tests.</td>
</tr>
</tbody>
</table>
3. To understand the concept of learning according to behaviouristic, cognitive and constructivist theories.
4. To understand the changing concept of classroom environment in 21st century.
5. To familiarize the maxims of teaching.
6. To familiarize the virtual learning environment.
7. To identify the qualities and competencies required for a science teacher.
8. To understand the changing roles of teacher in teaching-learning process.
9. To familiarize the concept of Continuing professional development.

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. To familiarize and appreciate the development of science in India and Contributions of scientists in India and abroad.</td>
<td><strong>Development of science education in India.</strong></td>
<td>Seminar</td>
<td>Participation in group discussion.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Personality</td>
<td>Questioning.</td>
</tr>
</tbody>
</table>

UNIT II SCIENCE – A CONCEPTUAL ANALYSIS NATURE AND DEVELOPMENT (Theory hours-8)

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. To familiarize and appreciate the development of science in India and Contributions of scientists in India and abroad.</td>
<td><strong>Development of science education in India.</strong></td>
<td>Seminar</td>
<td>Participation in group discussion.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Personality</td>
<td>Questioning.</td>
</tr>
</tbody>
</table>
3. To familiarize the development of science in India.
4. To design different strategies to develop scientific Attitude.
5. To familiarize the emerging branches of Science.

Resolution of 1958, Indian Parliamentary and Scientific Committee & Role of NCERT in science education.
- An introduction to Emerging branches of science: Biotechnology, Nanotechnology, Bioinformatics, Geo informatics.

Profile presentation
Reflective practices.
PBL
Multimedia and interdisciplinary approach.
Team teaching.
Peer tutoring

UNIT-III AIMS AND OBJECTIVES OF TEACHING NATURAL SCIENCE (Theory hours-21)

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To identify the values of science and its transactional potentiality.</td>
<td>3.1Broad aims of teaching Natural Science: Awareness about the millennium development goals with special reference to developing scientific literacy(Practical, Civic and Cultural), Effecting social changes, promoting health and hygiene, Population control, Eradication of diseases, Better nutrition (Eradicate extreme poverty &amp; hunger),</td>
<td>Meaningful verbal expression. Group discussion. Narrative expression sessions in small or medium groups. Brain storming.</td>
<td>Participation in group discussion. Questioning. On-task behavior in class. Tests. Science dairy. Daily reflective journal. Participant observation. Student’s portfolio</td>
</tr>
<tr>
<td>2. To understand the aims and objectives of teaching Natural Science.</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>3. To understand the aims and objectives of NCF and KCF.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. To understand the different taxonomy of instructional objectives.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
5. To understand the concept of Objective based Instruction.
6. To understand triangular relationship between the instructional objectives, Learning experiences and evaluation.

| Removal of superstitions, Raising the standard of living: bringing science to home and community (longevity of life, decreasing infant mortality rate), | Seminar. Reflective practices. PBL. Multimedia and interdisciplinary approach. Team teaching. Peer tutoring |
| 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. | |
| o 3.2. An introduction to aims & Objectives of teaching Natural Science with respect to NCF and KCF. | |
| 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. | |
## UNIT IV METHODS AND STRATEGIES FOR TEACHING NATURAL SCIENCE (Theory hours 21)

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
</table>
| 1. To understand appropriate methods, techniques and strategies of teaching Natural science. | - **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. | - Meaningful verbal expression  
- Group discussion  
- Peer instruction  
- Narrative expression sessions.  
- Brain storming.  
- Seminar.  
- Reflective practices.  
- PBL.  
- Modular approach.  
- Multimedia and interdisciplinary approach.  
- Peer tutoring | - Participation in group discussion.  
- Questioning.  
- On-task behavior in class.  
- Tests.  
- Science diary.  
- Daily reflective journal  
- Participant observation. |
| 2. To develop skill in selecting appropriate methods, techniques and strategies of teaching Natural science. | | | |

### SUGGESTED REFERENCES


Sharma, R.C. Modern Science Teaching, Dhanpat Rai and Sons, Delhi.


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.)


Mangal, S.K., and Mangal, Uma, Educational Technology.


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)

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To generate a knowledge of terminologies and the interdependence of teaching and learning.</td>
<td>1.1. Pedagogic Content Knowledge (PCK) - Meaning, objectives, scope, principles and dimensions. 1.2. Pedagogic content analysis of secondary school syllabus prescribed by SCERT.</td>
<td>Meaningful verbal expression  Group discussion  Narrative expression sessions in small or medium groups</td>
<td>Performance assessment in group discussion  Assessment of Optional Note Book entries  Questioning  Tests  Peer evaluation</td>
</tr>
</tbody>
</table>
3. To make Pedagogiccontent knowledge analysis of secondary school Biology syllabus.

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. To develop skill in designing lesson plans based on different approaches.</td>
<td><strong>2.2 Designing lesson plans</strong> based on Herbartian Approach &amp; Constructivist Approach.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

UNIT III - TEACHING SKILLS AND ITS DEVELOPMENT:

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

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To understand the different types of teaching skills.</td>
<td><strong>Teaching skills</strong> – Definition, Core teaching skills, Components of teaching skills, Teaching skills specially required for Biology teacher.</td>
<td>Discussions in small or medium groups. Reflective practices.</td>
<td>Performance assessment in group discussion. Assessment of performance in brain storming.</td>
</tr>
<tr>
<td>2. To develop the teaching skills relevant to Biological science.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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.

- **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.

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To understand the meaning and definition of audio-visual aids</td>
<td>4.1 Design and development of materials for effective science learning</td>
<td>Discussions in small or medium groups.</td>
<td>Performance assessment in group discussion, debate etc.</td>
</tr>
<tr>
<td>2. To identify and comprehend the different types of audiovisual aids in teaching Natural Science.</td>
<td>4.2 Audiovisual aids</td>
<td>Seminar.</td>
<td>Assessment of assignments</td>
</tr>
<tr>
<td>4. To apply multimedia in teaching Natural Science.</td>
<td>Designing, developing and documenting minimum of one item for - improvised, Visual and graphic aids (Charts, Models,</td>
<td>PBL.</td>
<td>Tests</td>
</tr>
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<td></td>
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<td></td>
<td>Peer evaluation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Student’s portfolio</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Evaluating the audio visual aids</td>
</tr>
</tbody>
</table>
5. To design and develop the teaching learning aids for Natural Science.

- **Projected and non-projected aids** - OHP, LCD, Bulletin Board, Flannel Board, Interactive Board etc.
- **Activity aids** - Aquarium, Terrarium, and Nature Calendar.
- **4.3 Collection and preservation of specimens.**

### SUGGESTED REFERENCES

- Text books and handbooks of High School Biology Syllabus prescribed by SCERT
- Bruce R. Joyce, Marsha Weil and Emily Calhoun (2011): Models of Teaching (7th Ed.): USA, Pearson Education.
• Allen, D.W,(1996).Microteaching: A Description, Stanford University, School of Education, California.
• Wyman, Raymond, Audio-Visual Devices and Techniques, Amherest: University of Massachusetts, 1957

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
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

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To familiarize with the conceptualized version of components required to enter in teaching profession</td>
<td>Teaching - profession and service, Principles and Maxims of teaching, Instruction, Factors determine effective instruction, classroom Interactions, Learner, Learning, Learning environment, classroom as a social</td>
<td>Meaningful verbal presentation Brain storming Case analysis of 2/3 famous teachers</td>
<td>Report writing and verification Case analysis presentation</td>
</tr>
</tbody>
</table>
2. To mould the prospective teacher educators to uphold the professional spirit in diverse angles

| laboratory. |
| Teacher, Teacher as professional; Continuing Professional Development (CPD), Qualities and competencies of Social Science Teachers, Teacher responsibilities; multifarious roles: knowledge worker, facilitator, scaffold, mentor, social engineer, counselor, reflective practitioner and digital migrant. |
| Buzz session to generate varied roles of an ideal teacher |

References

- http://www.wikihow.com/Be-a-Professional-Teacher
- http://www.edpolicythoughts.com

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To acquaint with the basic concepts of Social Science as a discipline</td>
<td>Conceptual background of Social Science, Meaning and Scope, Need and significance</td>
<td>Meaningful verbal learning</td>
<td>Preparation of report on teacher Presentation</td>
</tr>
<tr>
<td>2. To identify subject matter</td>
<td>Content organization treatment of Social Science- Fusion, Integration and Correlation within Social Science- Understanding about</td>
<td>Participatory approach</td>
<td></td>
</tr>
</tbody>
</table>

Unit: 2 Nature, Scope and Development of Social Science Education. (10 Hrs + 4 Hrs)
organization process in Social Science- Fusion, Integration & Correlation

3. To analyze the relationship of Social Science with other subjects

- Correlation of Social science with other subjects- Language & Science

Co- operative learning
Discussion

References

- www.empoweringvision.org
- http://serc.carleton.edu
- http://www.ecosensorium.org
Primary, Secondary and Higher Secondary (Social Science) text books of SCERT and NCERT.

UNIT : 3 Aims and objectives of Teaching Social Science

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
</table>
| 1. To identify and analyze the aims and objectives of teaching Social Science | • Aims, objectives and values of teaching Social Science  
• Individual, Social, Cultural, National and | General discussion  
Analytical study | • Comparison chart on Basic concepts of Behaviorism, constructivism and cognitivism |
2. To endow with the significance of Taxonomy of instructional objectives in Social Science education
3. To gain an outlook of approaches in behaviorism, constructivism and cognitivism in Social Science education

<table>
<thead>
<tr>
<th>International considerations of Social Science</th>
<th>Focus group discussion Prepare a seminar paper with PPT support on the psychological implications in the pedagogical practices of Social Science.</th>
<th>and its analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bloom’s taxonomy of Instructional objectives (Revised)- Instructional objectives and specifications.</td>
<td>• Behaviorism, Cognitivism and Constructivism- approach &amp; practice in classroom- Comparison</td>
<td>• Seminar with Slide presentation (CE item for Edu. 04)</td>
</tr>
<tr>
<td>• Learning objectives and Learning Outcomes</td>
<td></td>
<td>• Test (CE Edu.4)</td>
</tr>
</tbody>
</table>

References
- http://www.unco.edu/cetl/sir/stating_outcome/document
- NCF (2005), KCF (2007)

**UNIT 4: Instructional Methods, Techniques and Strategies**

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
</table>
| 1. To analyze the unique features of different instructional methods suited for teaching Social Science. | - 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, Brainstorming, Buzz session, Debate, Seminar. | Seminar  
Debate  
Project | • Report presentation & verification |
| 2. To proficient in select most appropriate teaching methods in varied context and content. | | | |

**References**

- www.books.google.co.in
- www.flipkart.com
- http://www.celt.iastate.edu/creativity/techniques.html
• Atkins N.J and Atkins J.N, Practical Guide to Audio Visual Technique in Education
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 educators 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

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To understand the key aspects involved in systematic PCK analysis</td>
<td>Pedagogical content knowledge analysis (PCK) - Meaning, Scope, Features of PCK analysis, significance of PCK analysis in Social Science.</td>
<td>Narrative expression session</td>
<td>Content analysis presentation</td>
</tr>
<tr>
<td>2. To establish relationship between pedagogic knowledge with content analysis</td>
<td>Relationship between pedagogic analysis with content analysis Content Analysis –</td>
<td>Text book analysis</td>
<td>Brief report on text book analysis</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Collaborative learning</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Discussion- Prepare</td>
<td></td>
</tr>
</tbody>
</table>
3. To develop skill in analyzing the content of secondary level Social Science text books

<table>
<thead>
<tr>
<th>Procedure, facts, concepts, principles.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content analysis of secondary Social Science text books-(History, Geography, Political Science, Economics, Sociology areas)</td>
</tr>
<tr>
<td>content analysis of two units by each student teacher after discussion.</td>
</tr>
</tbody>
</table>

References

- http://www.csun.edu/science/ref/pedagogy/pck/
- Social Science text book of standard 8,9 & 10 of Kerala
- Teachers’ Hand book in Social Science for standard 8,9 &10
# Unit: 2 Instructional Planning and Designing Lesson Transcripts

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To justify the importance and phases of instructional planning in Social Science discipline</td>
<td>Instructional planning – Importance, Phases, Types - Year plan, Unit plan, Lesson plan</td>
<td>Group discussion</td>
<td>Discussion lessons -5</td>
</tr>
<tr>
<td></td>
<td>Procedure for the Preparation of year plan, unit plan and lesson plan</td>
<td>Co-operative learning</td>
<td>Demonstration lessons -3</td>
</tr>
<tr>
<td></td>
<td>Designing Lesson Transcripts</td>
<td>Meaningful verbal learning</td>
<td>Criticism lessons -5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Prepare model year plan, Unit plan &amp; lesson transcripts.</td>
<td>(Practical evaluation)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Video/ Demo lesson observation</td>
<td>Video lesson observation and reporting (CE- Edu.05)</td>
</tr>
<tr>
<td>2. To capacitate systematic planning and designs lesson transcripts</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. To develop skills in preparing lesson transcripts</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## References

- [http://answers.yahoo.com/question/](http://answers.yahoo.com/question/)
- [http://www.ierg.net/lessonplans/unit_plans.php](http://www.ierg.net/lessonplans/unit_plans.php)
### Unit: 3 Essential Requirements of Teaching Social Science Education

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
</table>
| 1. To equip prospective teacher educands in developing teaching skills through micro teaching practices | - 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 | - Micro teaching lesson notes/plans (Ten skills/ 2 skills per student )  
- **Performance in skill presentation**  
( Practical evaluation) |
| 2. To generate skill orientation among prospective teacher educands through practical experiences | | | |

### References
- Cooper, James M(1990) Classroom teaching skills.US: DC Health & Co
## Unit: 4 Instructional Resources in Teaching and Learning of Social Science

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
</table>
| 1. To conscientize the inevitable role of various instructional support in effective instructional practices. | • 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 multimedia | General discussion  
Workshop  
Displays  
Prepare resource map for effective utilization in Social Science | • 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
- [http://religionmanuals.tpub.com/14229/css/14229_322.htm](http://religionmanuals.tpub.com/14229/css/14229_322.htm)
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 required 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)

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
</table>
| 1. To familiarize with the conceptualized version of components required to enter in teaching profession | • 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 3 | • Report writing and verification  
• Case analysis  
• Identification and presentation |
2. To mould the prospective teacher educators to uphold the professional spirit of learners
   - 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

3. To develop professionalism and professional ethics among Geography teachers.

| 3 famous teachers Buzz session to generate varied role of an ideal teacher Lecture Discussion Online learning Internet access |
| Assessment and reflection |

Reference

- [http://www.wikihow.com/Be-a Professional – Teacher](http://www.wikihow.com/Be-a Professional – Teacher)
- [http://www.ed.policythoughts.com](http://www.ed.policythoughts.com)
- Arora M.L (1979) Teaching of Geography, Prakash Brothers, Ludhiana
- Elizabeth Perrot (1982), Effective Teaching Singapore: Longman
## Unit 2 Nature, Scope and Development of Geography Education (11 Hours + 6 Hours)

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
</table>
| 1. To acquaint with the meaning, nature, scope and modern concepts of Geography | • 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 | • Preparation of report on teacher presentation  
• Internal tests for Unit 1& 2(CE-1)  
• Assessment/ reflection |
| 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 | | | |

### Reference
- [www.empoweringvision.org](http://www.empoweringvision.org)
- [http://serc.carleton.edu](http://serc.carleton.edu)
- [http://www.ecosensorium.org](http://www.ecosensorium.org)
- Arora M.L (1979) Teaching of Geography, Prakash Brothers, Ludhiana
- Prasad Jagdish (1982), 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)**

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To identify and analyze the aims objectives and values of teaching Geography</td>
<td>• Aims, objectives, values- definition and meaning</td>
<td>Meaningful verbal learning</td>
<td>• Report presentation and verification</td>
</tr>
<tr>
<td>2. To identify the need of objectives based instruction</td>
<td>• Objectives based instruction and its need</td>
<td>Discussion</td>
<td>• Assessment/ reflection</td>
</tr>
<tr>
<td>3. To familiarize with the taxonomy of instructional objectives in Geography</td>
<td>• Learning objectives and learning outcomes</td>
<td>Brainstorming</td>
<td></td>
</tr>
<tr>
<td>4. To gain an outlook of constructivist, and behaviourist approaches in Geography</td>
<td>• Aims, objectives and values of teaching Geography</td>
<td>Analytical study</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Bloom’s Taxonomy of Educational objectives old and revised patterns-</td>
<td>Group investigation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>instructional objectives and specifications</td>
<td>Present Assignments</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Behaviourism cognitivism and constructivism</td>
<td>and prepare notes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Implications of theories of Piaget, Bruner, Vygotsky and Howard Gardner in</td>
<td>Lecture</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Geography teaching and learning</td>
<td>Web search</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Internet access</td>
<td></td>
</tr>
</tbody>
</table>
Reference

- http://www.unco.edu/cetl/sir//statingoutcome/document
- NCF (2005), KCF (2007)

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

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
</table>
| 1. To analyze the unique features of different methods suited for Geography instruction | • 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 Group | • Report presentation and verification  
• Seminar preparation presentation and report  
• CE.2  
• Assessment/ reflection |
| 2. To develop proficiency in selecting suited methods and strategies in varied contest and content in Geography education | | | |
3. To differentiate methods strategies and techniques of Geography instruction

<table>
<thead>
<tr>
<th>Geography</th>
<th>discussion and prepare notes</th>
<th>Present assignments</th>
<th>Internet access</th>
<th>Web search</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Observation/ Narration/ Dramatization</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Co-operative/ collaborative learning</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Brainstorming and Peer- tutoring</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Reference**

- www.books.google.co.in
- www.flipkart.com
- http://www.celt.iastate.edu/creativity/techniques.html
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)

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To understand the key aspect involved in systematic PCK analysis</td>
<td>Pedagogic content Knowledge (PCK) analysis – Meaning, definition, objectives scope, Significance and dimensions</td>
<td>Narrative expression Assignment Meaningful verbal learning Textbook analysis Collaborative learning</td>
<td>Assessment of learning process and reflections Brief report on text book analysis Content analysis presentation</td>
</tr>
<tr>
<td>2. To establish relationship between Pedagogic knowledge with content analysis</td>
<td>Relationship between PCK and Content analysis identifying facts, concepts, principles etc.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. To develop skill in analyzing the Content analysis of secondary level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>content of secondary level Geography and Economics content materials</td>
<td>Geography and Economic content materials</td>
<td>Group discussion Prepare content analysis of a unit by each student after discussion Web search Internet access</td>
<td></td>
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<tr>
<td>---</td>
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<td>---</td>
<td></td>
</tr>
</tbody>
</table>

**Reference**

- www. Moodle.org
- [http://www.csun.edu/Science/ref/pedagogy/pck](http://www.csun.edu/Science/ref/pedagogy/pck)
- Arora M.L (1970). Teaching of Geography, Prakash Brothers, Ludhiana
- Social science II textbook of std. 8, 9 & 10 of Kerala
## Unit 2. Instructional Planning and Designing Lesson Templates (19 Hours + 8 Hours)

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To justify the importance and phases of Instructional Planning in Geography</td>
<td>• Planning for instruction – need and importance&lt;br&gt;• Types of plan – Year Plan, unit plan/ Syllabus grid, Resource Plan- their need, significance steps and procedure for preparation&lt;br&gt;• Lesson templates/ Teaching Manuals – Need characteristics, principles, values and advantages&lt;br&gt;• Designing / format and steps in criticism</td>
<td>Group discussion&lt;br&gt;Co-operative learning&lt;br&gt;Meaningful verbal learning&lt;br&gt;Prepare model year plan/ unit plan&lt;br&gt;Prepare script for video lesson&lt;br&gt;Prepare ICT enabled lesson&lt;br&gt;Video lesson / demonstration classes -observation&lt;br&gt;Online learning&lt;br&gt;Web search</td>
<td>• Discussion lesson&lt;br&gt;• Videos observation&lt;br&gt;• Script for video lesson&lt;br&gt;• ICT enabled lesson plans&lt;br&gt;• Demonstration lesson&lt;br&gt;• Criticism lesson (practical evaluation)&lt;br&gt;<strong>Internal Test (Unit 1 &amp; 2)</strong>&lt;br&gt;<strong>CE-1</strong></td>
</tr>
<tr>
<td>2. To capacitate systematic planning and designs of lesson templates</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. To develop skills in preparing lesson templates</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Reference**
- http://answers.yahoo.com/question
- http://www.i erg.net/lessonplans/unit plans.php
- Geography textbook of standard 8-10<sup>th</sup> of Kerala state / Teachers Hand book in Geography for standards 8, 9 & 10
- NCERT: Standard 11<sup>th</sup> 12<sup>th</sup> Geography textbook

169
- NCERT: Geography practical text book

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

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
</table>
| 1. To equip prospective teacher educators in developing teaching skills through micro-teaching practices | - 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 | - Micro-teaching lesson notes/plans (Ten skills) one skill per student  
- Performance in skill presentation (practical evaluation)  
- Assignments |
| 2. To generate skill orientation among prospective teacher educands through practical experiences | | | |
| 3. To familiarise with the basic requirements for learning | | | |

### Reference
- Varma. O.P & Vedanayagam E.G, (1993), Geography teaching, New Delhi, sterling Publishers
- Dave, Pushkin (2001). Teacher Training California: ABC CL 10

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

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
</table>
| 1. To conscientize the inevitable role of various instructional support in effective instructional practices | • 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/ AV aids- 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 | • 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 |
| 2. To acquire skills in constructing and using different instructional aids | • Seminar (preparation presentation and report)  
• CE-2 | | |
| 3. To familiarize with the basic resources for teaching Geography | • 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/ AV aids- Radio, TV, film, computers  
• Display boards- chalkboard, bulletin boards, Interactive board  
• Projected aids- OHP, LCD, Video  
• Activity aids – Excursion, field trips | | |

**Reference**

- Varma O.P & Vedanayagam, E.G (1993 Geography Teaching, New Delhi, Sterling Publishers
- Singh. EW (1985) Teaching of Geography, Vinod Pustak Mandal, Agra
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)

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To familiarize with the conceptualized version of components required to enter in teaching profession</td>
<td>- 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.</td>
<td>Meaningful verbal presentation Brain storming Case analysis of 2/3 famous teachers Buzz session to</td>
<td>- Idea generating exercises - Case analysis presentation</td>
</tr>
</tbody>
</table>
2. To mould the prospective teacher educators to uphold the professional spirit in diverse angles

- Teacher, Teacher as professional; Continuing Professional Development (CPD), Teacher responsibilities; multifarious roles: knowledge worker, facilitator, scaffoldor, mentor, social engineer, counselor, reflective practitioner and digital migrant.

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To acquaint with the basic concepts of commerce as a discipline</td>
<td>• 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.</td>
<td>Meaningful verbal learning Participatory approach Open forum discussion Co-operative learning Discussion</td>
<td>Preparation of report on teacher Presentation Comparison grid preparation - Correlation of Commerce education with other subjects</td>
</tr>
<tr>
<td>2. To equip with varied dimensions of commerce education strands.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. To integrate essential inter disciplinary attributes in commerce education.</td>
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</tr>
</tbody>
</table>
### UNIT: 3  Aims and objectives of Teaching Commerce (14 Hrs + 10 Hrs)

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To compete with constructs aims and objectives of teaching commerce</td>
<td>• Aims of Teaching Commerce</td>
<td>General discussion</td>
<td>• Comparative analysis - Bloom’s taxonomy of Instructional objectives</td>
</tr>
<tr>
<td></td>
<td>• General objectives of teaching commerce</td>
<td>Analytical study</td>
<td>traditional with Revised one</td>
</tr>
<tr>
<td></td>
<td>• Bloom’s taxonomy of Instructional objectives (Revised )</td>
<td>Group investigation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Objectives –NCERT</td>
<td>Focus group discussion</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Curricular objectives and Principles of framing curricular objectives.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. To endow with the significance of Taxonomy of instructional objectives in commerce education.</td>
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</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To analyze the unique features of different instructional methods suited for teaching commerce</td>
<td>• 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.</td>
<td>Seminar, Debate, Buzz session, Quiz session, Problem solving method, Project method</td>
<td>• Report presentation &amp; verification</td>
</tr>
<tr>
<td>2. To proficient in select most appropriate teaching methods in varied context and content.</td>
<td>• Techniques of Teaching – Drill, Brain storming, Role play, Review, Dramatization, Buzz session, simulation, Quiz session.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. To opt and practice apposite techniques to extract process and product in commerce teaching</td>
<td>• Instructional strategies – Co operative learning strategies, Collaborative learning strategies, Scaffolding strategies.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
References

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)

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To understand the key aspects involved in systematic PCK analysis</td>
<td>• 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,</td>
<td>Narrative expression session Text book analysis Collaborative learning Discussion</td>
<td>• Pedagogic Content Knowledge analysis presentation • Brief report on higher secondary text book analysis</td>
</tr>
<tr>
<td>2. To be capable of establishing relationship between pedagogic with content analysis</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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

**Unit: 2 Instructional Planning and Designing Lesson Templates (20 Hrs + 12 Hrs)**

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To justify the importance and phases of instructional planning in commerce discipline</td>
<td>Instructional planning – Importance, Phases, Types - Year plan, Unit plan, Lesson plan, Resource unit</td>
<td>Descriptive method, Group discussion, Demonstration method, Co-operative learning Meaningful verbal learning</td>
<td>Video observation (2 Nos), Script for video lesson(1 No), ICT enabled lesson plan(1 No), Demonstration lessons(3 Nos), Criticism lessons(5 Nos)</td>
</tr>
<tr>
<td>2. To capacitate systematic planning and designs lesson templates</td>
<td>Procedure for the Preparation of year plan, unit plan and lesson plan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. To develop skills in preparing lesson plan</td>
<td>Designing Lesson Templates – Business Studies and Accountancy.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To equip prospective teacher educands in developing teaching skills through micro teaching practices</td>
<td>Essential requirements – Teaching Competencies and Skills. Micro teaching - Meaning, Phases, steps. Micro teaching – Lesson templates, Practice</td>
<td>Experiential learning, Demonstration, Reflective practices</td>
<td>Micro teaching lesson notes/plans (Ten skills/1 skill per student ), Performance in skill presentation</td>
</tr>
</tbody>
</table>
2. To generate skill orientation among prospective teacher educands through practical experiences and assessment mechanisms.

- Skills in using ICT
- Link practice.

General discussion
Demonstration method
Analysis of video records

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To conscientize the inevitable role of various instructional support in effective instructional practices.</td>
<td>Instructional Resources: textbook, workbook, handbook, source book.</td>
<td>Illustration</td>
<td>Text book analysis</td>
</tr>
<tr>
<td>2. To acquire skills in constructing and using different instructional aids.</td>
<td>Resource Mapping</td>
<td>Demonstration</td>
<td>Workbook preparation</td>
</tr>
<tr>
<td></td>
<td>Instructional aids: Importance, educational values, classification of learning aids: projected, Non-projected and activity aids.</td>
<td>General discussion</td>
<td>Handling of various instructional aids</td>
</tr>
<tr>
<td></td>
<td>Hands on experience: Computer, LCD Projector, Interactive white board and multimedia</td>
<td>Workshop</td>
<td>Displays</td>
</tr>
</tbody>
</table>

References
- Cooper, James M (1990) Classroom teaching skills. US: DC Health & Co
- Higher secondary business studies and accountancy text book (Plus 1 & Plus 2). SCERT, KERALA
• 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)

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To acquaint student teachers with the process of teaching learning in the changing scenario</td>
<td>Classroom as an organization-Teacher and Learner, Definitions of learning from different point of view (behaviouristic, cognitive and constructivist), Interdependence of Teaching-Learning process.</td>
<td>Meaningful verbal expression</td>
<td>• Performance Assessment in group discussion</td>
</tr>
<tr>
<td>2. To familiarize with the maxims of teaching</td>
<td>Changing concept of classroom environment- classroom climate- An introduction to conducive, learner friendly, inclusive, Virtual learning environment (VLE) and Classroom without walls</td>
<td>Group discussion</td>
<td>• Tests</td>
</tr>
<tr>
<td>3. To understand the concept of learning given by behaviourists, cognitivists and constructivists</td>
<td></td>
<td>Narrative expression sessions in small or medium groups</td>
<td>• Peer evaluation</td>
</tr>
<tr>
<td>4. To familiarize with the changing classroom environment</td>
<td></td>
<td>PBL</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Video streaming</td>
<td></td>
</tr>
</tbody>
</table>
5. To develop understanding in Continuing Professional 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

(CWW).
- Teacher as a professional- Teacher qualities, competencies and responsibilities. Role of Teacher as manager, leader, knowledge worker, guide, supervisor, mentor, scaffold, social engineer, reflective practitioner in teaching-learning process.
- Maxims of teaching.
- Continuing professional development (CPD)-conceptual Analysis.

Unit 2: Home Science – A conceptual Analysis (10+5=15 hours)

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To comprehend the nature and scope of Home Science</td>
<td>Nature of Home science- Home Science-Science as well as art, Areas of Home science</td>
<td>Group discussion Seminar Workshop symposium</td>
<td>Document analysis Online assessment Quiz programme</td>
</tr>
<tr>
<td>3. To familiarize the development of science in India</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. To familiarize the related branches of Home science</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Unit 3: Aims and Objectives of Teaching Home Science (25+4=29 hours)

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
</table>
| 1. To acquaint with the aims and objectives of teaching Home science | • 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 Krathwohl), 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 | • Questioning  
• Participation in group discussions  
• Participant observation  
• Tests  
• Blog posting |
### Unit 4: Methods and Strategies for Home Science Teaching (25+6=31 hours)

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To understand methods, strategies and techniques of teaching Home Science</td>
<td>• An introduction - Meaning and Definition of Strategies, Methods, Techniques and Approaches</td>
<td>Meaningful verbal expression</td>
<td>• Analysis in group discussion.</td>
</tr>
<tr>
<td></td>
<td>• Teacher initiated methods- Lecture method and Lecture demonstration method.</td>
<td>Group discussion</td>
<td>• Participant observation.</td>
</tr>
<tr>
<td></td>
<td>• Learner initiated methods- Laboratory method, assignment method, Project method, Inductive method, Problem Solving method, Supervised Study</td>
<td>Peer instruction</td>
<td>• MCQ based discussion.</td>
</tr>
<tr>
<td></td>
<td>• Approaches- Inductive, Deductive, Constructivist, Modular, Multimedia, Interdisciplinary approaches</td>
<td>Brain storming</td>
<td>• Project evaluation</td>
</tr>
<tr>
<td></td>
<td>• Techniques- Debate, Seminar, Symposium, Discussion, Discussion 66, Buzz session, Brain storming, Simulation, Role play, Field trip, Panel discussion, Colloquium.</td>
<td>Debate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Self instruction strategies- programmed instruction- CAI, CMI</td>
<td>Symposium</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Cooperative /collaborative strategies of learning for less able, able and more able (Differential Teaching)</td>
<td>Small group projects</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Explicit teaching</td>
<td></td>
</tr>
<tr>
<td>2. To distinguish between teacher initiated and learner initiated methods</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. To identify and comprehend the different strategies, methods and approaches and techniques in teaching Home Science</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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Reference

- 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.)

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-Str...
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)

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To understand pedagogic content knowledge (PCK) and find its scope in teaching and learning</td>
<td>Pedagogic Content Knowledge (PCK)- Meaning and Scope.</td>
<td>Meaningful verbal expression</td>
<td>Analysis in group discussion</td>
</tr>
<tr>
<td>2. To understand the steps involved in PCK analysis</td>
<td>Content analysis- Meaning, Purpose and steps.</td>
<td>Group discussion</td>
<td>Report on Higher Secondary / Vocational Higher Secondary text book analysis</td>
</tr>
<tr>
<td></td>
<td>PCK Analysis - Content Analysis, Learning outcomes, Pre requisites, Inputs that enrich</td>
<td>Document writing</td>
<td>Peer evaluation</td>
</tr>
</tbody>
</table>

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3. To apply the principles of pedagogic analysis.

Learning (Teaching-learning resources, Environmental inputs), Community resources, Enrichment Activities, Assessment techniques, Assignments.

- PCK Analysis of Home Science content from Higher Secondary/Vocational Higher Secondary school syllabus prescribed by SCERT

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To acquaint with the planning of instruction</td>
<td>Planning- Need and Importance.</td>
<td>Meaningful verbal expression</td>
<td>• Performance assessment in group discussion</td>
</tr>
<tr>
<td>2. To develop understanding of different types of planning</td>
<td>Different types of planning- Purposes and steps-Year Plan, Unit Plan, Resource Unit, Lesson Plan- Herbartian steps Behaviourist and Constructivist formats</td>
<td>Group discussion Explicit teaching seminar co-operative learning</td>
<td>• Assessment of optional notebook entries</td>
</tr>
<tr>
<td>3. To design lesson templates based on different formats</td>
<td></td>
<td></td>
<td>• Discussion lesson template preparation (5)</td>
</tr>
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<td></td>
<td></td>
<td>• Observation and analysis of video of sample classes (2)</td>
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<tr>
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<td></td>
<td>• Demonstration lessons (3)</td>
</tr>
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<td></td>
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<td>• Blog creation</td>
</tr>
</tbody>
</table>

Unit 2: Instructional Planning for Teaching Home science (14+8=22 hours)
### Unit 3: Essential Requirements of Teaching Home Science (18+10=28 hours)

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To identify competencies required for a teacher to be professional.</td>
<td>- Teacher Competencies-Subject competencies, Pedagogical competencies, Technological competencies.</td>
<td>Meaningful verbal expression</td>
<td>- Analysis in group discussion</td>
</tr>
<tr>
<td>2. To develop understanding of various teaching skills</td>
<td>- Teaching skills-definition, core teaching skills, components of teaching skills</td>
<td>Group discussion</td>
<td>- Lesson segment preparation</td>
</tr>
<tr>
<td>3. To understand microteaching and its relevance in the development of teaching skills</td>
<td>- Microteaching - Definitions and meaning, objectives, principles, steps, microteaching cycle</td>
<td>Document analysis and</td>
<td>- Observation schedule designing</td>
</tr>
<tr>
<td>4. To design, practice and document micro lessons in Home Science</td>
<td>- 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.</td>
<td>Peer evaluation</td>
<td>- Think, Pair and Share sessions</td>
</tr>
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<td></td>
<td>- Link Practice</td>
<td>Document analysis</td>
<td>- Recording and evaluation of Micro Teaching Lessons (10 skills / one skill per student)</td>
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<td></td>
<td></td>
<td>Video observation</td>
<td>- Criticism lessons (5)</td>
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<td></td>
<td></td>
<td>Reflective practices</td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To understand the importance of learning aids and improvised aids in learning Home Science</td>
<td>- Design and development of Learning aids and improvised aids for effective learning, significance of audio-visual aids in teaching learning of home science.</td>
<td>Narrative expression sessions in small or medium groups</td>
<td>- Participant observation</td>
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<td>- Analysis in group discussion</td>
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<td>- Class test</td>
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<td>- Material Development Circles</td>
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</tbody>
</table>
2. To acquire hands-on experience in designing and developing suitable learning aids for classroom instruction
3. To develop understanding in resource mapping

| Text book- Qualities, how to evaluate a good text book in Home Science | Document analysis |
| Resource Mapping | Drill and Practice |
| Lab sessions |
| Practicals |
| Involvement in subject association activity |

Reference

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 acquaint 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

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
</table>
| 1. To get acquainted with the meaning, aim and objectives of Physical Education | • 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

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
</table>
| 1. To familiarize the physical fitness components and the modes of developing them. | • **Physical Fitness** – 12 hours  
• Definition  
• Components of Physical Fitness  
• Health related Physical Fitness  
• Activities for developing Physical Fitness components  
• Practice | Theoretical orientation  
Fitness centre work out sessions  
Group activity | • Projects  
• (work out plans)  
• Performance analysis |

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

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
</tr>
</thead>
</table>
| 1. Provide knowledge and understanding regarding the scientific basis and benefits of Physical activity.  
2. To have a practical knowledge on physical workout plans | • **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 | Theoretical orientation  
Fitness centre work out sessions  
Group activity | • Assignments  
• Group projects |
### Learning Outcome

1. To get acquaint with the concept and techniques of Yoga (Pranayamas).
2. Holistic and curative aspects of Yoga.
3. Practice of Yoga

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<thead>
<tr>
<th>Major concepts</th>
<th>Strategies &amp; Approaches</th>
<th>Assessment</th>
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</thead>
<tbody>
<tr>
<td>Yoga – 25 hours</td>
<td>Theoretical presentation</td>
<td>Group assessment</td>
</tr>
<tr>
<td>- Meaning, Concept, history, need and importance of yoga</td>
<td>Demonstration</td>
<td>Participation</td>
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<td>- Principles of Yoga</td>
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<td>Practicing yoga</td>
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<tr>
<td>- Elements of Yoga</td>
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<td>Demonstration</td>
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<tr>
<td>- Holistic and curative aspects of Yoga</td>
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<td>Partner assessment</td>
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<tr>
<td>- Science of Yoga - Yoga and memory</td>
<td>Group activity</td>
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<tr>
<td>- Components that improve memory ; Asanas, Pranayama, Meditation.</td>
<td>Partner practice forms.</td>
<td>Individual assessment</td>
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<tr>
<td>- Pranayama (breathing techniques)</td>
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<tr>
<td>- Relaxation techniques : Asanas(steps to follow and benefits).-practice of yoga.</td>
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<tr>
<td>Padmasana</td>
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<td>Siddhasana</td>
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<td>Vajrasana</td>
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<td>Dhanurasana</td>
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<td>Bhujangasana</td>
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<td>Halasana</td>
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<td>Shalbhasana</td>
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<td>Yogamudra</td>
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<td>Naukasan</td>
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### Guidelines for Practical Work

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

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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)