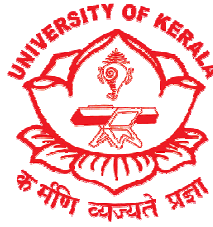


# UNIVERSITY OF KERALA



## Two Year B. Ed. Curriculum - 2015

*Credit and Semester System with Grading*

**FACULTY OF EDUCATION**

**&**

**BOARD OF STUDIES IN EDUCATION (Pass)**

## Preface

With a view to maintaining quality in the curricular programmes offered by the University of Kerala, the B.Ed. curriculum was revised in 2013. Within months of the implementation of the revised curriculum, the National Council of Teacher Education (NCTE), decided to extend the duration of the B. Ed. programmes offered in the country from one year to two years. The NCTE Regulations 2014 and other documents provided guidelines for framing a curriculum for the two year BEd. Programme. So from February 2015 regular meetings of the members of Faculty & Board of Studies, Workshops with teacher educators as participants and meetings of subject experts commenced soon and this new curriculum evolved.

The vision statement of the curriculum reads: *Empowerment of prospective teachers with value embedded and competency-based teacher education curriculum, to equip them to be professionally competent, adaptable and socially committed, to meet the challenges in a knowledge society.*

With a view to realize the proposed vision and produce a prospective teacher who is fully equipped to teach a learner of the 21<sup>st</sup> century, several novel topics have been introduced and various instructional strategies have been advocated. Perhaps the decision to extend the scope of techno pedagogy which was already introduced in the earlier revision will make this venture of the University of Kerala unique in every respect.

The Faculty and Board of studies in Education (Pass) of the University of Kerala would like to place on record our sincere appreciation of the dedicated effort of the fraternity of teacher educators for this noteworthy contribution.

Dean  
Faculty of Education  
University of Kerala

Chairman  
Board of studies in Education (Pass)  
University of Kerala

## CONTENTS

Sl.No.	Sections	Page No.
1	Introduction	1-41
2	Guiding Principles	
3	Curriculum Vision	
4	Vision Highlights	
5	General Objectives of B.Ed. Course	
6	Regulations for the B. Ed. Course	
7	Definition of Terms	
8	Course Outline	
9	Structure of the B. Ed. Course	
10	Curriculum Framework	
11	Credit details of the Course	
12	Details of theory courses, Semester- I	
13	Details of theory courses, Semester – II	
14	Details of theory courses, Semester – III	
15	Details of theory courses, Semester – IV	
16	Details of Practical work associated with theory – CE	
17	Details of Practical Courses/Related Practical work	
18	Guidelines for Practical work	
19	Strategies of Learner Assessment	
20	Grading System	
21	Modes of Curriculum Transaction	
22	Curriculum Orientation	
23	Composition of the Curriculum	
24	Curriculum- Semester I	42-192
25	Curriculum - SemesterII	193-323
26	Curriculum – Semester III	324-402
27	Curriculum-Semester IV	403-437
28	Appendix.	438-451

## INTRODUCTION

*“Teachers, I believe, are the most responsible and important members of society because their professional efforts affect the fate of the earth.”*

*--Helen Caldicott*

*“Teaching is the profession on which all other professions depend. Indeed, everybody who is anybody was enabled to become somebody by a teacher.”*

*– Prof. Linda Darling – Hammond.*

‘The destiny of the country is being shaped in her classrooms’ is not rhetoric. This focuses on the crucial role, the teaching community is expected to play in making education qualitative. It is now well-recognized that the most important single factor for the quality of education and thus for the efficiency and quality of the pupils’ learning is the quality of the teachers’ training. Hence considerable thought and attention have been given to teacher education by all societies throughout the world. Decades ago, developing subject matter competency and pruning teaching skills in a specific subject was the prime objective of teacher training programs. But with the advent of globalization and the increasing convergence of digital technologies, educational practices have undergone tremendous changes throughout the world to meet the challenges brought about by this new landscape.

The teacher of today is not just one who can teach a specific subject, but one who possesses the skills and competencies needed for the 21st century to transact the content and teaching not just a local student but even to a student residing in the remotest corner of the world with widely varying interests and abilities. In short, teacher education has to function as a professional learning under a global canvas. This requires an education system that adopts a holistic approach to developing the whole person and his or her full potential. To ensure quality in a changing scenario and to keep at par with national and global requirements and to keep in pace with national norms, a revision of the current B.Ed. curriculum became imperative. The prime objective of this revision, as done in the earlier revision, was to mould a Curriculum to equip prospective teachers the knowledge, skills, attitude, competence and commitment to face the challenges of the 21<sup>st</sup> century.

### **Guiding Principles**

The University of Kerala modified its one year B. Ed. curriculum in 2013 to equip the prospective teachers to cope up with the needs of the educational community of the 21<sup>st</sup> century. A new thrust in the field of Educational Technology, introduction of the concept of Pedagogic & Techno-pedagogic Content Knowledge Analysis, Evidence-based Performance Evaluation, Development of Teacher competencies, Entrepreneurship in education, development of professionalism ... a few novel aspects that was incorporated in the curriculum revision. Moreover the need to lessen the burden of an over loaded curriculum, the lack of sufficient practical orientation, reducing the gap between theory and practice, the inclusion of obsolete content and a failure to be in touch with the realities existing in schools and the requirements of the community, the quite often heard limitations were also given special care while moulding the curriculum. Quite significantly, all these had been addressed and taken into consideration in the present revision also. Special care has been taken in the present revision also to retain the best practices of the earlier curriculum and to observe fully the NCTE New Regulations 2014. In fact, this curriculum revision was also successful in bringing together the expertise of several practicing teachers at different stages in

identifying appropriate content and also in choosing popular instructional strategies to transact the curriculum.

As a guiding principle the National Council for Teacher Education itself has specified the nature and content of the Two Year B.Ed. curriculum through 'NCTE Regulations 2014' and associated publications. 'The B. Ed. Curriculum shall be designed to integrate the study of subject knowledge, human development, pedagogical knowledge and communication skills. The program shall comprise three broad curricular areas: Perspectives in Education/core areas, Curriculum and Pedagogic studies/Optional subjects, and Engagement with the field/Practical courses. Information and Communication Technology (ICT), gender, yoga education, and disability/inclusive education shall form an integral part of B. Ed curriculum' (NCTE Regulations 2014). A perusal of the reports of various commissions and committees like NCERT, directions from UGC, observations of Justice Verma Commission Report, NCFTE (2009), the recommendations and observations in this respect of several committees at the Regional, State and National level had guided the present attempt to a large extent. The academic discussions resolved to the view that the teacher education curriculum should address a learning environment for the 21st century that enables students to collaborate, share best practices, integrate 21<sup>st</sup> century skills into classroom practices, provide access to quality learning tools, technologies and resources leading to an expansion of the learning environment to the community and an international setting, both face-to-face as well as online.

### **Curriculum Vision**

*Empowerment of prospective teachers with value embedded and competency-based teacher education curriculum, to equip them to be professionally competent, adaptable and socially committed, to meet the challenges in a knowledge society.*

**Vision Highlights:** The curriculum gives emphasis for:

- Meeting the challenges of education in a knowledge society
- Development of Teacher Competencies
- Development of Professionalism
- Capacity building
- Moulding techno-pedagogically competent teachers
- Entrepreneurship in education
- Teacher as a Relationship Manager
- Teacher as a HRD manager
- Evidence-based performance assessment
- Development of Aesthetic qualities
- Health and fitness for future

## **General Objectives of the B. Ed. course**

The curriculum is designed to enable the student-teacher:

1. To acquire various teacher competencies and development of professionalism through qualitative multi-level strategies and practices.
2. To identify and resolve the major social, intellectual and environmental issues / challenges faced by our pluralistic society and make use of the knowledge in nurturing/equipping the classroom learner to face those challenges.
3. To develop a proper value system based on the cultural, social, political and moral bases of Indian society.
4. To develop teacher-identity required of a professional through theoretical discourses, school / community- based experiences, and reflective practices that continually evaluate the effects of his/her choices and actions.
5. To understand the central concepts, tools of inquiry, and structures of individual disciplines and develop the ability to evolve meaningful learning experiences.
6. To imbibe knowledge and develop understanding of the various psychological, sociological and philosophical principles and practices in respect of learners of different stages/multi level and develop the ability to facilitate effective learning.
7. To make use of the knowledge of effective verbal, nonverbal and media-based information and communication technologies in all facets of learning to foster active inquiry, collaboration, and supportive interaction in the classroom.
8. To conceptualize various formal and informal evidence-based performance assessment strategies and develop an ability to evaluate contextually the multidimensional development of the learner.
9. To generate adequate professional capacity for performing multiple roles entrusted on him/her, enabling him/her to compete in the national and international scenario.
10. To develop his/her managerial capacities in human relations for promoting human resources for national development.
11. To internalize appropriate theoretical and practical inputs in order to render an integrated-holistic understanding about physical fitness, developing positive attitudes, values, skills and behaviour related to health and physical education and to promote health and fitness for current and future lifestyles among student teachers.
12. To develop the aesthetic quality of the prospective teachers through Art Education.

## Regulations for the B Ed Degree Course

1. The B. Ed. program proposed is based on Credit and Semester System with Grading. The curriculum will be introduced in all the Colleges of Teacher Education affiliated to University of Kerala and the Kerala University Colleges of Teacher Education directly run by the University with effect from 2015-2016 admissions.
2. The course is of two year duration. Semester system is followed in the course. There will be four semesters, with 100 working days each, excluding admissions, University examination and preparatory holidays.
3. The course consists of three components Theory, CE and other related practical work. Course content is divided into three areas Perspectives in Education (core papers), Curriculum and Pedagogic courses (optional papers) and Related Practical work. B. Ed offers specialization in 13 optional subjects viz. Malayalam, English, Hindi, Sanskrit, Arabic, Tamil, Mathematics, Physical Science, Natural Science, Social Science, Geography, Commerce and Home Science.
4. There shall be a basic unit of 50 students, with a maximum of two units as intake for the course. There shall not be more than twenty five students per teacher for a school subject for method courses and other practical activities of the program to facilitate participatory teaching and learning.
5. Medium of instruction for the course is English. However, candidates may write the examination in Malayalam for all papers except language papers. The Optional papers for 'Languages' shall be written in the same language itself.
6. Admission to the course will be on the basis of the eligibility requirements, rules and regulations for B.Ed. admissions fixed by the Government of Kerala and approved by the University from time to time.
7. A candidate will be considered to have satisfactory attendance if she/he earns not less than 75% attendance for theory classes and 90% for school internship. Seven point grade system is followed in rating attendance. Attendance will be noted in letter grades in the mark list. The attendance range and respective grades are as follows: **Gr: A+ (96-100)**, **Gr: A (91-95%)**, **Gr: B+ (86-90%)**, **Gr: B (81-85%)**, **Gr: C+ (76-80%)**, **Gr: C (75 and below)** = ( For calculating percentage of attendance decimals will be rounded to the nearest whole number)
  - Condonation of shortage of attendance shall be as per existing University rules. Candidates with shortage of attendance beyond condonable limit will not be eligible to register for the end semester University examination. In such cases the candidate has to repeat the course by taking re-admission from the University.
  - Only candidates who secure the required minimum attendance in the semester and registered for the end Semester University Examination is eligible to continue studies in the next Semester.
8. Readmission: - Those candidates who discontinue the course can be given the provision of readmission if otherwise eligible as long as the scheme exists. If the scheme is over, candidates have to join the course as a fresh entrant, if otherwise eligible.

9. Transitory regulations: - Whenever a Course/Scheme of instruction is changed in a particular year, three more examinations immediately following thereafter shall be conducted according to the old syllabus/regulations. Failed candidates or candidates who could not appear for these examinations have to attend classes for the new course, according to the changed Syllabus/regulations.
10. All the program/courses carrying credits/grades should be compulsorily attended by all the candidates for the successful completion of the course. Only such candidates are permitted to register for the end Semester University examination.
- (i) Candidates who have completed the requirements of practical work related to theory (CE) and other practical courses of a Semester and registered for the End Semester University examination alone will be allowed entry to the next Semester.
  - (ii) The marks and respective grades of internal assessment (CE & Practical Courses) during each Semester have to be forwarded to the University by the institutions within one week after closing of the semester, both Online and manual/printed. (hard and soft copy)
  - (iii) School Induction Program (school initiatory experience) is for a period of one week during Semester II. School Internship will be for a period of 20 weeks divided into two phases. Phase I will be for a period of 10 weeks during Semester III and Phase II arranged for another 10 weeks during Semester IV.
  - (iv) Assessment of School induction Program of Semester II will be done (jointly by the General and Optional teachers) by the Colleges of Teacher Education internally. There will be no external evaluation. School internship Phase I of semester III will be evaluated internally by the Colleges of Teacher Education and practice-teaching schools, as per the guidelines in the curriculum. School internship Phase II of Semester IV will be evaluated both internally (jointly by the colleges & practice-teaching schools) and externally (by the external examination team appointed by the University).
  - (v) Practical work related to Perspectives in Education (Core) and Curriculum and Pedagogic Courses (Optional papers) CE & other Practical Courses/Engagement with the field (college, school and community based) have to be compulsorily attended by all the student-teachers to be eligible for appearing for the Semester End University Examination. All the Practicals during Semester I, II & III will be assessed by teacher educators internally. Records/reports/products related to CE and Practical courses have to be prepared and maintained and have to be made available for assessment, if demanded. Marks and respective grades of assessment have to be forwarded to the University within one week after the closing of the semester (Both hard and soft copy)
  - (vi) The total number of lessons required to be completed during Phase I is 40 and Phase II, 30. Practical work related to School Internship Phase II and Minor project /Action Research/Case Study have to be compulsorily completed by all the student-teachers to be eligible for appearing for the External Practical Examinations of Semester IV. Candidates who have completed practical courses and eligible for presentation to the Practical Examination of the External Practical Board, alone will be permitted to



register for the Online Theory Examination of Semester IV. Physical attendance of the candidate during the practical examination and viva-voce is mandatory.

11. Candidates who have completed the requirements of a semester (attendance, CE and other practical courses) alone will be eligible for appearing for the End semester University examination and promotion to the next semester. Those who have satisfactorily completed the course requirements and uploaded the internal marks to the university by the college concerned, and fail to appear for the university examination alone can appear in supplementary examinations. Those who fail to comply with the course requirements have to redo the semester and get promotion to the next semester.
12. For a pass in the examination, a candidate should secure a minimum of 50% marks (C+ Grade) in aggregate with a minimum of 40% (C Grade) in each Theory Paper in the External Examination of the University, 40% for theory and CE put together and 50% (C+ Grade) for Practice Teaching/School internship in teaching. There is no separate minimum for CE & other practical courses in all the semesters. Marks/grades for CE and Practical courses have to be given to various categories on the basis of proper guidelines and criteria. Detail records have to be maintained by institutions in each case.
13. All the theory papers of all semesters will be assessed through external examination of the University. CE and other practical courses of Semester I, II and III will be assessed internally only. CE and other practical courses of Semester IV will be assessed both internally and externally.
14. In case a candidate gets minimum for all papers but fails to get semester minimum, she/he has to re-appear the papers with less than 50% of marks to secure a pass in that semester.
15. If a passed candidate wants to improve his/her grade he/she can appear for the theory examination and improve the grades within two years of completion of the course, if the same scheme exists.
16. Course betterment is limited to theory alone. For course betterment in theory, candidates have to appear for the concerned examinations with the regular schedule. Higher marks of the two i.e., marks before betterment and after betterment whichever is higher will be considered.
17. There will be no Supplementary Examination. Failed candidates have to write/appear for the paper/papers for which they have failed with the regular candidates. On securing the separate minimum in those paper/papers the candidate will be declared to have passed the examination provided he/she secures an aggregate of 50% (C+ Grade). Three chances will be given for reappearance as long as the same scheme exists.
18. Even if a candidate fails to secure the required minimum marks/grades for a pass in Theory during a semester but has completed the Practical Courses/Engagement with field he/she shall be allowed entry to the next Semester.
19. If under any circumstances, a candidate fails in Teaching Practice/School Internship, he/she shall be permitted to repeat the same after the completion of the course with special permission from the University as long as the same scheme exists. It will be considered as a Second appearance in all respects. There is no provision for reassessment of Internship in teaching.
20. Re-admission and college transfers are as per University rules.

## Definition of Terms

- **Semester system:** The semester system is a proactive system with program designed to be completed gradually within a period covering multiples of half an academic year. It is a pattern of the course in which the whole program is divided into different parts and each part is intended for a specified period of time, called semesters. The present B.Ed. program involves four semesters.
- **Credit:** Credit refers to the unit of value awarded for the successful completion of specific courses, intended to indicate the quality of the course instruction in relation to the total requirements for a course. Credit is a unit of input measured in terms of 'Study Hours'. It represents the number of 'Study Hours' in a particular period of time devoted to various aspects of the teaching-learning process such as attending classes, engaging in assignments, projects, community activities, gathering information from library and internet sources and other Practical Courses required by the course. Here, one credit for the B.Ed. program is considered equivalent to 30 Study Hours and one credit carries 25 marks ( **1 credit-30 hours/25 marks**). Students can earn and accumulate credits on the basis of the number and types of tasks they have successfully completed. All the tasks that carry credit are compulsory.
- **Grading:** Grading is the process of applying standardized measurements of varying levels of comprehension within a subject area. Assigning letters for indicating the performance of students in each paper/area by giving due weightage according to the scale adopted. Seven Point Scale is suggested for the grading purpose and Indirect Grading shall be used. In Indirect Grading the students are assessed using conventional marking mode and the marks awarded are converted into letter grades as per the weightage assigned. Marks will be converted to respective Grades for whole programmes and courses only and not to each and every component. ( e.g. EDU 01 – total marks earned for Theory & CE is converted to Grade)
- **Grade Point Average (GPA):** The means of grades obtained on a number of subjects/tasks for a specified period is the GPA. GPA is calculated by dividing *the sum of the weighted grade points obtained by a student in various subjects in a semester* by *the total number of credits taken by him/her in the semester*. The value shall be rounded off to two decimal places.
- **Cumulative Grade Point Average (CGPA):** CGPA is the value obtained by dividing *the total Credits for a Semester X Sum of GPA for all the semesters* by *the total credits for the entire course*. The value shall be rounded off to two decimal places. CGPA will be converted to letter grades for final results.
- **Perspectives in Education (core papers) :** Indicates the subjects of study under theoretical discourses which are compulsory for all the students undergoing the course (EDU 01 to 03, 06 to 08, 11 to 12, and 14)
- **Curriculum and Pedagogic Courses (optional subjects) :** Indicates the subject which the student-teachers specializes in the course (EDU 04, 05, 09, 10, 13 & 15).
- **CE :** Continuous Evaluation indicates the process of assessing the practical work related to Perspectives in Education/core papers and Curriculum and Pedagogic courses/Optional papers prescribed in the curriculum continuously to award marks/grades on the basis of an assessment criteria. The total marks of CE for each paper should be the sum of marks for various tasks specified in the paper.

- **Engagement with the field/Practical Courses** : Practical courses in the curriculum indicates the practical work expected to be done by the student-teacher related to subjects of study indicated as EDU-101, 102, 103 ; 201, 202, 203; 301, 302, 303 & 401 as a compulsory requirement.

### Course Outline

Semester	Working days	Working Hours/Credits	Marks			Total Marks
			Theory	Practical	Total	
I	100	600/20	250	250	500	2000
II	100	600/20	250	250	500	
III	100	600/20	150	350	500	
IV	100	600/20	100	400	500	

### Structure of B.Ed. Course

A. Theoretical Discourses-Subject codes			B. Practical Courses	
Semester	Perspectives in Education	Curriculum and Pedagogic Courses	Nature of Practical - Subject code	
Semester I	EDU 01 EDU 02 EDU 03	EDU 04 EDU 05	College Based. School Based. Community Based	EDU-101(101.1- 101.3) EDU-102 ( - ) EDU-103 (103.1)
Semester II	EDU 06 EDU 07 EDU 08	EDU 09 EDU 10	College Based. School Based Community Based	EDU-201(201.1-201.3) EDU-202 (202.1) EDU-203 ( - )
Semester III	EDU 11 EDU 12	EDU 13	College Based School Based Community Based	EDU-301(303.1-301.2) EDU-302(302.1) EDU-303(303.1)
Semester IV	EDU-14EDU-15		College, School & Community Based	EDU-401(401.1-401.3)

**Two year B. Ed Curriculum Framework.**

<b>Semester – I(June – October)-- one credit = 30 hours: 1 credit carries 25 marks.</b>					
<b>Theory – Perspectives in Education (core papers)</b>					
<b>Subject code</b>	<b>Subject Title</b>	<b>External</b>	<b>Internal</b>	<b>Total</b>	<b>Credits (1credit=30hours)</b>
<b>EDU-01</b>	<b>Knowledge and Curriculum: Philosophical and sociological Perspectives.</b>	<b>50</b>	<b>25</b>	<b>75</b>	<b>3</b>
<b>EDU-02</b>	<b>Developmental Perspectives of the Learner.</b>	<b>50</b>	<b>25</b>	<b>75</b>	<b>3</b>
<b>EDU-03</b>	<b>Technology and Communication in Education.</b>	<b>50</b>	<b>25</b>	<b>75</b>	<b>3</b>
<b>Theory – Curriculum and Pedagogic Courses. (optional subjects)</b>					
<b>EDU-04 (1-13)</b>	<b>Theoretical Base of ....Education.</b>	<b>50</b>	<b>25</b>	<b>75</b>	<b>3</b>
<b>EDU-05 (1-13)</b>	<b>Pedagogic Content Knowledge Analysis : .....</b>	<b>50</b>	<b>25</b>	<b>75</b>	<b>3</b>
<b>Engagement with the Field/Practical Courses:EDU – 101 &amp; 103.</b>					
<b>EDU – 101: College Based</b>					
<b>EDU 101.1</b>	<b>Discussion, Demonstration &amp; Criticism lesson (5 marks each)</b>		<b>15</b>	<b>25</b>	<b>1</b>
	<b>Micro-teaching – 2 skills</b>		<b>10</b>		
<b>101.2</b>	<b>Yoga, Health &amp; Physical Education</b>		<b>50</b>	<b>50</b>	<b>2</b>
<b>101.3</b>	<b>Art &amp; Aesthetics Education</b>		<b>25</b>	<b>25</b>	<b>1</b>
<b>EDU – 103: community Based</b>					
<b>103.1</b>	<b>Vocational/Work Education</b>		<b>15</b>	<b>25</b>	<b>1</b>
	<b>Field Trip – optional-wise</b>		<b>10</b>		
	<b>Total Marks &amp; Credits</b>	<b>250</b>	<b>250</b>	<b>500</b>	<b>20</b>
	<b>Total Hours &amp; Credits</b>	<b>20 credits X 30 hrs=600 hrs</b>			
	<b>Total Working Hours</b>	<b>100 days X 6 hrs = 600 hrs.</b>			

<b>Semester – II (November – March) – one credit = 30 hours : one credit carries 25 marks.</b>					
<b>Theory – Perspectives in Education.(core papers)</b>					
<b>Subject Code</b>	<b>Subject Title</b>	<b>External</b>	<b>Internal</b>	<b>Total</b>	<b>Credits(1credit =30hours)</b>
<b>EDU-06</b>	<b>Education in Indian Society.</b>	<b>50</b>	<b>25</b>	<b>75</b>	<b>3</b>
<b>EDU-07</b>	<b>Perspectives of Learningand Teaching.</b>	<b>50</b>	<b>25</b>	<b>75</b>	<b>3</b>
<b>EDU-08</b>	<b>Assessment in Education .</b>	<b>50</b>	<b>25</b>	<b>75</b>	<b>3</b>
<b>Theory-Curriculum and Pedagogic Courses.(optional subjects )</b>					
<b>EDU-09 (1-13)</b>	<b>Curriculum andResources in Digital Era :.....Education</b>	<b>50</b>	<b>25</b>	<b>75</b>	<b>3</b>
<b>EDU-10(1-13)</b>	<b>Techno-Pedagogic Content Knowledge Analysis:.....</b>	<b>50</b>	<b>25</b>	<b>75</b>	<b>3</b>
<b>Engagement with the Field/PracticalCourses : EDU – 201, 202 &amp; 203.</b>					
<b>EDU – 201 : College Based</b>					
<b>201.1</b>	<b>Discussion, Demonstration&amp; Criticism Lessons(5 marks each)</b>		<b>15</b>	<b>25</b>	<b>1</b>
	<b>Field Trip / Education Tour</b>		<b>10</b>		
<b>201.2</b>	<b>Health &amp; Physical Education</b>		<b>50</b>	<b>50</b>	<b>2</b>
<b>201.3</b>	<b>Art Education &amp; Theatre Practice</b>		<b>25</b>	<b>25</b>	<b>1</b>
<b>EDU – 202 : School Based</b>					
<b>202.1</b>	<b>School Induction Program</b>		<b>15</b>	<b>25</b>	<b>1</b>
	<b>Observation of modellessons (2 nos. ) and reporting during school induction</b>		<b>10</b>		
	<b>Total Marks &amp; Credits</b>	<b>250</b>	<b>250</b>	<b>500</b>	<b>20</b>
	<b>Total Hours &amp; Credits</b>	<b>20 credits X 30 hrs=600 hrs</b>			
	<b>Total Working Hours</b>	<b>100 days X 6 hrs = 600 hrs.</b>			

<b>Semester – III (June – October) : one credit = 30 hours. One credit carries 25 marks.</b>					
<b>Theory – Perspectives in Education(core papers)</b>					
<b>Subject code</b>	<b>Subject Title</b>	<b>External</b>	<b>Internal</b>	<b>Total</b>	<b>(1credit=30hours)Credits</b>
<b>EDU-11</b>	<b>**Developmental Perspectives in Education.</b>	<b>50</b>	<b>25</b>	<b>75</b>	<b>3</b>
<b>EDU-12</b>	<b>Learner in the Educational Perspective.</b>	<b>50</b>	<b>25</b>	<b>75</b>	<b>3</b>
** Educational Management, Environmental education, Health education & Entrepreneurship Education.					
<b>Theory- Curriculum and Pedagogic Courses(optional subjects)</b>					
<b>EDU-13 (1-13)</b>	<b>Emerging Trends and Practices in ..... Education.</b>	<b>50</b>	<b>25</b>	<b>75</b>	<b>3</b>
<b>Engagement with the Field/PracticalCourses : EDU – 301, 302 &amp; 303.</b>					
<b>EDU – 301 : CollegeBased</b>					
<b>301.1</b>	<b>Art &amp; Aesthetics Education.</b>		<b>25</b>	<b>25</b>	<b>1</b>
<b>301.2</b>	<b>Health and Physical Education</b>		<b>25</b>	<b>25</b>	<b>1</b>
<b>EDU – 302 : School Based</b>					
<b>302.1</b>	<b>School Internship-Phase I (10 week)</b>		<b>150</b>	<b>175</b>	<b>7</b>
	<b>1. Optionals(curriculum&amp; pedagogic courses)</b>				
	<b>2. Health &amp; Physical Education</b>		<b>25</b>		
<b>EDU – 303 : Community Based</b>					
<b>303.1</b>	<b>Community Living Camp (Program of Understanding the self)</b>		<b>50</b>	<b>50</b>	<b>2</b>
	<b>Total Marks &amp; Credits</b>	<b>150</b>	<b>350</b>	<b>500</b>	<b>20</b>
	<b>Total Hours &amp; Credits</b>	<b>20 credits X 30 hrs=600 hrs</b>			
	<b>Total Working Hours</b>	<b>100 days X 6 hrs = 600 hrs.</b>			

<b>Semester – IV (November – March) : one credit = 30 hours. One credit carries 25 marks.</b>					
<b>Theory – Perspectives in Education.(core papers)</b>					
<b>EDU-14</b>	<b>Advanced Studies : Perspectives in Education.</b>	<b>50</b>	<b>25</b>	<b>75</b>	<b>3</b>
<b>Theory – Curriculum and Pedagogic courses (optional subjects)</b>					
<b>EDU-15 (1-13)</b>	<b>Advanced Studies :Curriculum and Pedagogic Courses in.....Education</b>	<b>50</b>	<b>25</b>	<b>75</b>	<b>3</b>
<b>Practical Courses/Engagement with the Field – EDU – 401.</b>					
<b>EDU 401.1</b>	<b>Minor Project / Action Research / Case Study – (30-50 pages) Viva-voce (external only)</b>		<b>40</b> <b>10</b>	<b>50</b>	<b>2</b>
<b>401.2</b>	<b>School Internship Phase II (10 weeks) 1. Optional (cu &amp; pedagogic courses) 2. Yoga, Health &amp;Physical Education.</b>		<b>200</b> <b>25</b>	<b>225</b>	<b>9</b>
<b>401.3</b>	<b>Achievement test &amp; Analysis</b>		<b>20</b>	<b>75</b>	<b>3</b>
	<b>Diagnostic Test&amp; Remediation</b>		<b>15</b>		
	<b>Reading and Reflecting on a text.</b>		<b>25</b>		
	<b>Reflective Journal</b>		<b>15</b>		
	<b>Total</b>	<b>100</b>	<b>400</b>	<b>500</b>	<b>20</b>
	<b>Total Hours &amp; Credits</b>	<b>20 credits X 30 hrs=600 hrs</b>			
	<b>Total Working Hours</b>	<b>100 daysX6 hrs = 600 hrs.</b>			

**Credit details of the Course**

Semester	Subject Code	Papers	Credits		Total Credits 1 credit=30hrs
			Theory	CE	
Sem. I	EDU 01	Core paper I	2 credits	1 credit	3 credits
	EDU 02	Core paper II	2 credits	1 credit	3 credits
	EDU 03	Core paper III	2 credits	1 credit	3 credits
	EDU04.1-04.13	Optional I	2 credits	1 credit	3 credits
	EDU 05.1-05.13	Optional II	2 credits	1 credit	3credits
	Practical Courses	College Based(EDU 101) School Based( EDU 102 ) Community Based(EDU 103)		4 credits 0 credits 1 credits	5 credits
	<b>Total</b>			<b>10 credits</b>	<b>10 credits</b>
Sem. II	EDU 06	Core paper V	2 credits	1 credit	3 credits
	EDU 07	Core paper VI	2 credits	1 credit	3 credits
	EDU 08	Core paper VII	2credits	1 credit	3 credits
	EDU 09.1-09.13	Optional III	2 credits	1 credit	3 credits
	EDU10.1-10.13	Optional IV	2 credits	1 credit	3 credits
	Practical Courses	College Based (EDU201) School Based (EDU202) Community Based (EDU203)		4 credits 1 credit 0 credit	5credits
	<b>Total</b>			10 credits	10credits
Sem. III	EDU 11	Core Paper VIII	2 credits	1 credit	3 credits
	EDU 12	Core Paper IX	2 credits	1 credit	3 credits
	EDU 13.1-13.13	Optional V	2 credits	1 credit	3 credits
	Practical Courses	College Based(EDU 301) School Based(EDU 302) Community Based(EDU 303)		2 credits 7credits 2 credits	11 credits
<b>Total</b>			6 credits	14 credits	<b>20 credits</b>
Sem. IV	EDU 14	Core Paper X	2 credits	1 credit	3 credits
	EDU-15	Optional VI	2 credits	1 credit	3 credits
	Practical Courses	College, School & Community Based (EDU 401.1 – 401.3)		14 credits	14 credits
<b>Total</b>			4 credits	16 credits	<b>20 credits</b>
<b>Grand Total</b>					<b>80 credits</b>



**Details of Theory Courses -- Semester I**

<b>Code</b>	<b>Title</b>	<b>Instructional hours/credits</b>	<b>Related Practical work-CE-Hours/credits</b>
<b>EDU 01</b>	Knowledge and Curriculum: Philosophical and Sociological Perspectives.	<b>60 hrs / 2 credits</b>	<b>30 hrs / 1 credit</b>
<b>EDU02</b>	Developmental Perspectives of the Learner.	<b>60 hrs / 2 credits</b>	<b>30 hrs / 1 credit</b>
<b>EDU 03</b>	Technology and Communication in Education.	<b>60 hrs / 2 credits</b>	<b>30 hrs / 1 credit</b>
<b>EDU 04.1</b>	Theoretical Base of Malayalam Education	<b>60 hrs / 2 credits</b>	<b>30 hrs / 1 credit</b>
<b>EDU 04.2</b>	Theoretical Base of English Education	<b>60 hrs / 2 credits</b>	<b>30 hrs / 1 credit</b>
<b>EDU 04.3</b>	Theoretical Base of Hindi Education	<b>60 hrs / 2 credits</b>	<b>30 hrs / 1 credit</b>
<b>EDU 04.4</b>	Theoretical Base of Sanskrit Education	<b>60 hrs / 2 credits</b>	<b>30 hrs / 1 credit</b>
<b>EDU 04.5</b>	Theoretical Base of Arabic Education	<b>60 hrs / 2 credits</b>	<b>30 hrs / 1 credit</b>
<b>EDU 04.6</b>	Theoretical Base of Tamil Education	<b>60 hrs / 2 credits</b>	<b>30 hrs / 1 credit</b>
<b>EDU 04.7</b>	Theoretical Base of Mathematics Education	<b>60 hrs / 2 credits</b>	<b>30 hrs / 1 credit</b>
<b>EDU 04.8</b>	Theoretical Base of Physical Science Education	<b>60 hrs / 2 credits</b>	<b>30 hrs / 1 credit</b>
<b>EDU 04.9</b>	Theoretical Base of Natural Science Education	<b>60 hrs / 2 credits</b>	<b>30 hrs / 1 credit</b>
<b>EDU04.10</b>	Theoretical Base of Social Science Education	<b>60 hrs / 2 credits</b>	<b>30 hrs / 1 credit</b>
<b>EDU 04.11</b>	Theoretical Base of Geography Education	<b>60 hrs / 2 credits</b>	<b>30 hrs / 1 credit</b>
<b>EDU 04.12</b>	Theoretical Base of Commerce Education	<b>60 hrs / 2 credits</b>	<b>30 hrs / 1 credit</b>
<b>EDU 04.13</b>	Theoretical Base of Home Science Education	<b>60 hrs / 2 credits</b>	<b>30 hrs / 1 credit</b>
<b>EDU 05.1</b>	Pedagogic Content Knowledge Analysis- Malayalam	<b>60 hrs / 2 credits</b>	<b>30 hrs / 1 credit</b>
<b>EDU 05.2</b>	Pedagogic Content Knowledge Analysis- English	<b>60 hrs / 2 credits</b>	<b>30 hrs / 1 credit</b>
<b>EDU 05.3</b>	Pedagogic Content Knowledge Analysis- Hindi	<b>60 hrs / 2 credits</b>	<b>30 hrs / 1 credit</b>
<b>EDU 05.4</b>	Pedagogic Content Knowledge Analysis- Sanskrit	<b>60 hrs / 2 credits</b>	<b>30 hrs / 1 credit</b>

<b>EDU 05.5</b>	Pedagogic Content Knowledge Analysis- Arabic	<b>60 hrs / 2 credits</b>	<b>30 hrs / 1 credit</b>
<b>EDU 05.6</b>	Pedagogic Content Knowledge Analysis- Tamil	<b>60 hrs / 2 credits</b>	<b>30 hrs / 1 credit</b>
<b>EDU 05.7</b>	Pedagogic Content Knowledge Analysis- Mathematics	<b>60 hrs / 2 credits</b>	<b>30 hrs / 1 credit</b>
<b>EDU 05.8</b>	Pedagogic Content Knowledge Analysis- Physical Science	<b>60 hrs / 2 credits</b>	<b>30 hrs / 1 credit</b>
<b>EDU 05.9</b>	Pedagogic Content Knowledge Analysis- Natural Science	<b>60 hrs / 2 credits</b>	<b>30 hrs / 1 credit</b>
<b>EDU 05.10</b>	Pedagogic Content Knowledge Analysis- Social Science	<b>60 hrs / 2 credits</b>	<b>30 hrs / 1 credit</b>
<b>EDU 05.11</b>	Pedagogic Content Knowledge Analysis- Geography	<b>60 hrs / 2 credits</b>	<b>30 hrs / 1 credit</b>
<b>EDU 05.12</b>	Pedagogic Content Knowledge Analysis- Commerce	<b>60 hrs / 2 credits</b>	<b>30 hrs / 1 credit</b>
<b>EDU 05.13</b>	PedagogicContent Knowledge Analysis- Home Science	<b>60 hrs/2 credits</b>	<b>30 hrs / 1 credit</b>

## Details of Theory Courses - Semester II

<b>Code</b>	<b>Title</b>	<b>Instructional hours/credits</b>	<b>Related Practical work Hours/credits</b>
<b>EDU 06</b>	Education in Indian Society.	<b>60 hrs / 2 credits</b>	<b>20 hrs / 1 credits</b>
<b>EDU 07</b>	Perspectives of Learning and Teaching.	<b>60 hrs / 2 credits</b>	<b>20 hrs / 1 credits</b>
<b>EDU 08</b>	Assessment in Education.	<b>60 hrs / 2 credits</b>	<b>20 hrs / 1 credits</b>
<b>EDU 09.1</b>	Curriculum & Resources in Digital Era : Malayalam Education	<b>60 hrs / 2 credits</b>	<b>20 hrs / 1 credit</b>
<b>EDU 09.2</b>	Curriculum & Resources in Digital Era : English Education	<b>60 hrs / 2 credits</b>	<b>20 hrs / 1 credit</b>
<b>EDU 09.3</b>	Curriculum & Resources in Digital Era : Hindi Education	<b>60 hrs / 2 credits</b>	<b>20 hrs / 1 credit</b>
<b>EDU 09.4</b>	Curriculum & Resources in Digital Era : Sanskrit Education	<b>60 hrs / 2 credits</b>	<b>20 hrs / 1 credit</b>
<b>EDU 09.5</b>	Curriculum & Resources in Digital Era : Arabic Education	<b>60 hrs / 2 credits</b>	<b>20 hrs / 1 credit</b>
<b>EDU 09.6</b>	Curriculum & Resources in Digital Era : Tamil Education	<b>60 hrs / 2 credits</b>	<b>30 hrs / 1 credit</b>
<b>EDU 09.7</b>	Curriculum & Resources in Digital Era : Mathematics Education	<b>60 hrs / 2 credits</b>	<b>30 hrs / 1 credit</b>
<b>EDU 09.8</b>	Curriculum & Resources in Digital Era : Physical Science Education	<b>60 hrs / 2 credits</b>	<b>30 hrs / 1 credit</b>
<b>EDU 09.9</b>	Curriculum & Resources in Digital Era : Natural Science Education	<b>60 hrs / 2 credits</b>	<b>30 hrs / 1 credit</b>
<b>EDU 09.10</b>	Curriculum & Resources in Digital Era : Social Science Education	<b>60 hrs / 2 credits</b>	<b>30 hrs / 1 credit</b>
<b>EDU 09.11</b>	Curriculum & Resources in Digital Era : Geography Education	<b>60 hrs / 2 credits</b>	<b>30 hrs / 1 credit</b>
<b>EDU 09.12</b>	Curriculum & Resources in Digital Era : Commerce Education	<b>60 hrs / 2 credits</b>	<b>30 hrs / 1 credit</b>
<b>EDU 09.13</b>	Curriculum & Resources in digital Era : Home Science Education	<b>60 hrs / 2 credits</b>	<b>30 hrs / 1 credit</b>
<b>EDU10.1</b>	Techno-Pedagogic Content Knowledge Analysis-Malayalam	<b>60 hrs / 2 credits</b>	<b>30 hrs / 1 credit</b>
<b>EDU10.2</b>	Techno-Pedagogic Content Knowledge Analysis-English	<b>60 hrs / 2 credits</b>	<b>30 hrs / 1 credit</b>

<b>EDU10.3</b>	Techno-Pedagogic Content Knowledge Analysis-Hindi	<b>60 hrs / 2 credits</b>	<b>30 hrs / 1 credit</b>
<b>EDU10.4</b>	Techno-Pedagogic Content Knowledge Analysis-Sanskrit	<b>60 hrs / 2 credits</b>	<b>30 hrs / 1 credit</b>
<b>EDU10.5</b>	Techno-Pedagogic Content Knowledge Analysis-Arabic	<b>60 hrs / 2 credits</b>	<b>30 hrs / 1 credit</b>
<b>EDU10.6</b>	Techno-Pedagogic Content Knowledge Analysis-Tamil	<b>60 hrs / 2 credits</b>	<b>30 hrs / 1 credit</b>
<b>EDU10.7</b>	Techno-Pedagogic Content Knowledge Analysis-Mathematics	<b>60 hrs / 2 credits</b>	<b>30 hrs / 1 credit</b>
<b>EDU10.8</b>	Techno-Pedagogic Content Knowledge Analysis-Physical Science	<b>60 hrs / 2 credits</b>	<b>30 hrs / 1 credit</b>
<b>EDU10.9</b>	Techno-Pedagogic Content Knowledge Analysis-Natural Science	<b>60 hrs / 2 credits</b>	<b>30 hrs / 1 credit</b>
<b>EDU10.10</b>	Techno-Pedagogic Content Knowledge Analysis-Social Science	<b>60 hrs / 2 credits</b>	<b>30 hrs / 1 credit</b>
<b>EDU10.11</b>	Techno-Pedagogic Content Knowledge Analysis-Geography	<b>60 hrs / 2 credits</b>	<b>30 hrs / 1 credit</b>
<b>EDU10.12</b>	Techno-Pedagogic Content Knowledge Analysis-Commerce	<b>60 hrs / 2 credits</b>	<b>30 hrs / 1 credit</b>
<b>EDU 10.13</b>	Techno-Pedagogic Content Knowledge Analysis-Home Science.	<b>60 hrs / 2 credits</b>	<b>30 hrs / 1 credit.</b>

### Details of Theory Courses - Semester III

<b>Code</b>	<b>Title</b>	<b>Instructional hours/credits</b>	<b>Related Practical work Hours/credits</b>
<b>EDU 11</b>	Developmental Perspectives in Education.	<b>60 hrs / 2 credits</b>	<b>30 hrs / 1 credit</b>
<b>EDU 12</b>	Learner in the Educational Perspective	<b>60 hrs / 2 credits</b>	<b>30 hrs / 1 credit</b>
<b>EDU 13.1</b>	Emerging Trends & Practices in Malayalam Education.	<b>60 hrs / 2 credits</b>	<b>30 hrs / 1 credit</b>
<b>EDU 13.2</b>	Emerging Trends & Practices in English .Education.	<b>60 hrs / 2 credits</b>	<b>30 hrs / 1 credit</b>
<b>EDU 13.3</b>	Emerging Trends & Practices in Hindi Education.	<b>60 hrs / 2 credits</b>	<b>30 hrs / 1 credit</b>
<b>EDU 13.4</b>	Emerging Trends & Practices in Sanskrit Education.	<b>60 hrs / 2 credits</b>	<b>30 hrs / 1 credit</b>
<b>EDU 13.5</b>	Emerging Trends & Practices in Arabic Education.	<b>60 hrs / 2 credits</b>	<b>30 hrs / 1 credit</b>

<b>EDU 13.6</b>	Emerging Trends & Practices in Tamil Education.	<b>60 hrs / 2 credits</b>	<b>30 hrs / 1 credit</b>
<b>EDU 13.7</b>	Emerging Trends & Practices in Mathematics Education.	<b>60 hrs / 2 credits</b>	<b>30 hrs / 1 credit</b>
<b>EDU 13.8</b>	Emerging Trends & Practices in Physical Science Education.	<b>60 hrs / 2 credits</b>	<b>30 hrs / 1 credit</b>
<b>EDU 13.9</b>	Emerging Trends & Practices in Natural science Education.	<b>60 hrs / 2 credits</b>	<b>30 hrs / 1 credit</b>
<b>EDU 13.10</b>	Emerging Trends & Practices in Social Science Education.	<b>60 hrs / 2 credits</b>	<b>30 hrs / 1 credit</b>
<b>EDU 13.11</b>	Emerging Trends & Practices in Geography Education.	<b>60 hrs / 2 credits</b>	<b>30 hrs / 1 credit</b>
<b>EDU 13.12</b>	Emerging Trends & Practices in Commerce Education.	<b>60 hrs / 2 credits</b>	<b>30 hrs / 1 credit</b>
<b>EDU 13.13</b>	Emerging Trends & Practices in Home science Education	<b>60 hrs / 2 credits</b>	<b>30 hrs / 1 credit</b>

#### Details of Theory Courses - Semester IV

<b>Code</b>	<b>Title</b>	<b>Instructional hours/credits</b>	<b>Related Practical work Hours/credits</b>
<b>EDU 14</b>	Advanced Studies :Perspectives in Education. (Guided Self-Study)	<b>60 hrs /2 credits</b>	<b>30 hrs / 1 credit</b>
<b>EDU-15</b>	Advanced Studies: Curriculum and Pedagogic Courses-.....Education (guided self-study)	<b>60 hrs/2 credits</b>	<b>30 hrs / 1 credit</b>

- **EDU – 14 :Advanced Studies :Perspectives in Education.**
- **EDU – 15 : Advanced Studies : Curriculum and Pedagogic Courses -.....Education.**

This area has been included in the curriculum to achieve advanced learning in the areas psychology, technology and methodology and its integration with practice to **facilitate capacity building** among student-teachers. The knowledge and competencies acquired by the trainee during the entire course remains as the base of this course. The mode of learning proposed is guided self-study. The study has to be initiated/progressed by the student-teacher mainly through self effort by reference study, collecting study materials from web site, peer assistance, scaffolding, guided study etc. The achievement of the student-teacher in terms of capacity building will be assessed through the Online examination of the University scheduled for the last month of Semester IV.

**Details of Practical Work Associated with Theory: CE (25 marks/1 credit)**

**(a) Perspectives in Education (Core papers)**

<b>Sem.</b>	<b>Sub. Code</b>	<b>Nature of practicum.....</b>	<b>Marks</b>	<b>credits</b>	<b>Assessment</b>
<b>I</b>	<b>EDU-01</b>	<ol style="list-style-type: none"> <li>1. Seminar/presentation-1 (5 marks)</li> <li>2. Practicum-1(5 marks)</li> <li>3. Test-mid semester-1(5 marks)</li> <li>4. Capacity Building Program (skill development &amp; leadership building)-10 marks</li> </ol>	<b>25</b>	<b>One</b>	<b>Internal</b>
	<b>EDU-02</b>	<ol style="list-style-type: none"> <li>1. Seminar/presentation1 (5 marks)</li> <li>2. Practical1 (5 marks)</li> <li>3. Test –mid semester (5 marks)</li> <li>4. Capacity building Activity 1-10marks</li> </ol>	<b>25</b>	<b>One</b>	<b>Internal</b>
	<b>EDU-03</b>	<ol style="list-style-type: none"> <li>1. Seminar/presentation-1(5 marks)</li> <li>2. Test-mid semester exam(5 marks)</li> <li>3. Skill development-workshop practice(15 marks) ( Practice -5 marks, Blog creation and posting of materials -10 marks)</li> </ol>	<b>25</b>	<b>One</b>	<b>Internal</b>
<b>II</b>	<b>EDU-06</b>	<ol style="list-style-type: none"> <li>1. Seminar/presentation-1(5 marks)</li> <li>2. Practicum-1(5 marks)</li> <li>3. Test-mid semester exam(5 marks)</li> <li>4. Capacity Building Program(skill development &amp; leadership building) (10 marks)</li> </ol>	<b>25</b>	<b>One</b>	<b>Internal</b>
	<b>EDU-07</b>	<ol style="list-style-type: none"> <li>1. Practicum-1 (5 marks)</li> <li>2. Practical 1(5 marks)</li> <li>3. Test-mid semester exam1(5marks)</li> <li>4. Capacity building Activity 1 (10 mark)</li> </ol>	<b>25</b>	<b>One</b>	<b>Internal</b>
	<b>EDU-08</b>	<ol style="list-style-type: none"> <li>1. Seminar/presentation-1(5 marks)</li> <li>2. Test-mid semester exam(5 marks)</li> <li>3. Practicum- no.1(5marks)</li> <li>3. Practicum-no.2(10marks)Development of any one tool.</li> </ol>	<b>25</b>	<b>One</b>	<b>Internal</b>
<b>III</b>	<b>EDU-11</b>	<ol style="list-style-type: none"> <li>1. Test –mid semester exam.(5 marks)</li> <li>2. Practicum-1(5 marks)</li> <li>2. Seminar/presentation-(5 marks)</li> <li>3. Field study-1( 10 marks)</li> </ol>	<b>25</b>	<b>One</b>	<b>Internal</b>

	EDU-12	1. School based activity -1(5 marks) 2. Practical-1(5 marks) 3. Test-mid semester exam(5 marks) 4. Capacity Building Program(skill development & leadership building)- (10 marks)	25	One	Internal
IV	EDU-14	MCQ Test battery	25	25	Internal & External

(b) Curriculum and Pedagogic Courses (Optional Papers)

(i) Subjects.

Sem.	Sub. Code	Nature of Practicum.....	Marks	credits	Assessment
I	EDU-04	1. Practicum-1(5 marks) 2. Seminar/presentation-1 (5 marks) 3. Reading & reflecting on texts(10mks) 4. Mid semester exam –(5 marks)	25	One	Internal
	EDU-05	1. Observation of model video lessons & reporting(2nos.)(teacher monitored) – (5 marks ) 2. Practicals-1 (5 marks) 3. Test-mid semester exam (5 marks) 4. Subj. Assn activity- (5 marks) 5. Practicum – 1 (5 marks)	25	One	
II	EDU-09	1. Mid semester exam (5 marks). 2. Reading and Reflecting on texts (10marks) 3. Seminar/presentation-1 (5 marks) 4. Practicum – 1 (5 marks)	25	One	Internal
	EDU-10	1. Practical -1 (5 marks) 2. Test-mid semester (5 marks) 3. Subject Assn activity-(5 marks) 4. Group Practicum (video scripting, recording & uploading)- (10 marks.)			
III	EDU-13	1. Innovative work-1 (10 marks) 2. Reading and Reflecting on text(5marks) 3. Peer evaluation- (5 marks.) 4. mid semester exam (5 marks)	25	One	Internal
IV	EDU-15	MCQ Test battery (Practical)	25	One	Internal & External

(ii) Languages.

Sem.	Sub. Code	Nature of Practicum.....	Marks	Credits	Assessment
I	EDU-04	1. Practicum-1 (5 marks) 2. Seminar/Presentation-1 (5 marks) 3. Reading and Reflecting on Texts-1 (10 marks) 4. Mid semester exam- 5 marks	25	One	Internal
	EDU-05	1. Observation of model video lessons & reporting(2 nos.)-teacher monitored- (5 marks.) 2. Practicum-2 (5 marks each) 3. Test-mid semester – (5 marks) 4. Subject Assn activity- (5 marks).	25	One	
II	EDU-09	1. Practicum -1 (5 marks) 2. Reading and Reflecting on Text- 10 marks. 3. Seminar/presentation- (5 marks) 4. Mid semester exam – (5 marks)	25	One	Internal
	EDU-10	1. Practicum-1 (5 marks) 2. Test-mid semester exam – (5 marks) 3. Subject Assn. Activity- (5 marks.) 4. Group Practicum(video scripting, recording & uploading)(10 marks)	25	One	
III	EDU-13	1. Innovative work-1 (10 marks) 2. Reading and Reflecting on Text- (5 marks). 3. Peer evaluation- (5 marks) 4. Mid semester exam – (5 marks)	25	One	Internal
IV	EDU-15	MCQ Test battery (Practical)	25	One	Internal & External.

- Practicum:systematic study of problems from subject areas through collection of information from different sources –one Practicum in each subject - Records/short reports not exceeding 5 to 6 pages have to be maintained.
- Capacity Building Program: The aim of the activity is to equip student teachers to face the challenges of classroom situation in a multicultural society and also uplift the quality of teacher education in par with the global standards. Any activity that can enrich the student teacher by considering the individual potentialities of learners can be undertaken.



- Group Practicum-video script: Developing, enacting, recording and uploading one video script based on a single theme. The task can be undertaken in groups with 3 to 5 members.
- Seminar/presentation: The student-teacher has to take up either a seminar or any presentation to show his active involvement in the classroom transaction. The participation/involvement of the student in classroom activities have to be assessed by the teacher using criteria self-developed. .
- Subject association activity: Participation/contribution and reporting of the student-teacher in the subject association activities organized weekly by optional groups.
- Observation of video lessons: each student-teacher has to observe at least two video recorded lessons of experts and prepare observation notes. Format of observation has to be supplied by the teacher educator.
- Reading and reflecting on text: The aim of this course is to enable student-teachers to enhance their capacities as readers and writers by becoming participants in the process of learning and to respond to a variety of texts in different ways and also learn to think together. The aim is also to engage with the readings interactively-individually and in small groups. Each student-teacher is expected to read a variety of texts, including empirical, conceptual and historical work, policy documents, studies about schools, teaching, learning etc. and to prepare reflective notes.
- MCQ Test Battery: The student-teacher has to prepare Multiple Choice Question test batteries with 40 items each covering the syllabi of EDU - 14 & EDU - 15 as the requirement of CE (Practical). Out of 40 items of EDU - 14, 10 items each have to be prepared from the topics under perspectives of Education of Semester I, II, III and IV. Similarly a MCQ test battery for EDU -15 will have 40 MCQ items, 10 each covering the syllabi of Curriculum and Pedagogic Courses of Semester I, II, III, and IV respectively. It is better to start the preparation of MCQ test battery from Semester I itself and have to be completed and consolidated by semester IV. MCQ test batteries have to be presented before the External Evaluation Board along with the other requirements of Semester IV.
- Mid Semester Examination: A college level examination for all papers - of one hour duration and 25 marks with MCQ, very short answer and short answer questions. The marks earned in the examination has to be converted to 5.

**Details of Practical Courses : (Related practical work)**

**(a) College based (EDU-101,201,301)**

<b>Code EDU</b>	<b>Title</b>	<b>Task to be carried out</b>	<b>Marks/ Credits</b>	<b>Assessment</b>
<b>101.1</b>	<b>Discussion Lessons</b>	<b>5 nos.</b>	<b>5</b>	<b>Internal</b>
	<b>Demonstration Lessons</b>	<b>3 nos.</b>	<b>5</b>	
	<b>Criticism Lessons</b>	<b>5 nos.</b>	<b>5</b>	
	<b>Micro-teaching</b>	<b>2 skills/trainee &amp;recording</b>	<b>10/1 credit</b>	
<b>101.2</b>	<b>Yoga, Health &amp; Physical Education</b>	<b>Refer Cu Sem. I</b>	<b>50/2 credits</b>	<b>Internal</b>
<b>101.3</b>	<b>Art &amp; Aesthetics Education.</b>	<b>Refer Cu Sem. I</b>	<b>25/1 credit</b>	<b>Internal</b>
<b>201.1</b>	<b>Discussion lessons(ICT-1, Activity based-1, Model based-3)</b>	<b>5 nos.</b>	<b>5</b>	<b>Internal</b>
	<b>Demonstration lessons</b>	<b>2 nos.(models of teaching)</b>	<b>5</b>	
	<b>Criticism Lessons</b>	<b>5nos.</b>	<b>5</b>	
	<b>Field Trip/Education tour.</b>	<b>Participation</b>	<b>10/1 credit</b>	
<b>201.2</b>	<b>Health &amp; Physical Education</b>	<b>Refer Cu Sem. II</b>	<b>50/2 credits</b>	<b>Internal</b>
<b>201.3</b>	<b>Art Education and Theatre Practice.</b>	<b>Refer Cu Sem. II</b>	<b>25/1 credit</b>	<b>Internal</b>
<b>301.1</b>	<b>Art &amp; Aesthetics Education</b>	<b>Refer Cu Sem.III</b>	<b>25/1 credit</b>	<b>Internal</b>
<b>301.2</b>	<b>Yoga, Health &amp; Physical Education</b>	<b>Refer Cu Sem.III</b>	<b>25/1 credit</b>	<b>Internal</b>

**(b) SchoolBased**

<b>Code EDU</b>	<b>Title</b>	<b>Task to be carried out</b>	<b>Marks/ Credits</b>	<b>Assessment</b>
<b>202.1</b>	<b>Initiatory School Experiences/school induction program.(5 days)</b>	<b>3 periods teaching / shared practice without formal lesson plans</b>	<b>10</b>	<b>Internal</b>
		<b>preparation of diary/repot.</b>	<b>10</b>	
		<b>observation of lessons(2 nos.) and reporting</b>	<b>5/1 credit</b>	
<b>302.1</b>	<b>School Internship Phase – I ( 10 weeks)</b>			<b>Internal</b>
	<b>1. Curriculum &amp; Pedagogic Courses</b>	<b>40 lessons and associated work</b>	<b>150</b>	
	<b>2. Health and Physical Education</b>	<b>2 lessons and associated work</b>	<b>25 / 7 credits</b>	

(c) CommunityBased

Code EDU	Title	Task to be carried out	Marks/credits	Assessment
103.1	Field Visit (optional)	Field visit related to the subject –	10	Internal
	Vocational/Work Education (group)	supw- service & product-1 each/community work & report	15/1 credit	
303.1	Community Living Camp	Participation in 5 days camp	50/2 credits	Internal

Semester - IV

Code EDU	Title	Task to be carried out	Marks/credits	Assessment
401.1	Minor Project/Action Research/Case Study	Completion of the task & reporting in 30 to 50 pages.	40	Internal & External
		Viva-voce (external)	10/2 credits	
401.2	School Internship Phase – II			Internal & External
	1. Curriculum and Pedagogic Courses	30 lessons and associated work	200	
	2. Yoga & Health Education	2 lessons and associated work	25/9 credit	
401.3	Achievement test (1 no.)	Preparation of achievement test and analysis using statistical measures.	20	Internal & External
	Diagnostic Test	Preparation of Test and proposing remedial measures.	15	
	Reading & Reflecting on Text	Preparation of an account of the text read in the optional.	25	
	Reflective Journal	Journal for all days in practice.	15/3 credits	

## **Guidelines for Related Practical Work/Practical Courses.**

**EDU 103.1 – Field Trip/Visit** associated with the Curriculum and Pedagogic Courses (optional). Field visit appropriate to the content area has to be selected. The report has to be evaluated on the basis of rubrics developed by the teacher educator.

**EDU 103.1 – Vocational/Work Education (SUPW/Community Work).** The objective of this program include planning and executing productive work, develop social sensitivity, seek support from the locality, sensitize with dignity of labor, etc. This Community based practical - Socially Useful Productive Work (SUPW) has to be organized by the college at their convenience in the specified time. The task include one service (Participation in social activities, social services, social projects, social work etc) and submission of one product (e.g. -book binding, craft/art work, soap making, agarbathi, paper bag, designing and making electronic devices, candle making, film making, pot making, embroidery, improvisation,.....) Assessment has to be made on the basis of proper division of marks using Performa for assessment designed by the institution.

**EDU 201.3 – Art Education and Theatre Practice.** The aim of theatre practice is to help the student-teacher realize the role of dramatization and other art forms as transactional strategies in classroom instruction for enhancing learning and creativity. It involves visualization and writing of scripts (related to themes from optional content areas), direction, assigning and engaging roles, enacting of drama, making arrangements individually and with group assistance.

**EDU 202.1 – School Induction Program.** The sole purpose of Initiatory school experience is to provide the student-teacher an opportunity to have primary experiences with the functioning of the school. This school attachment program is for a period of five continuous working days giving them an opportunity to acquaint with the school environment and their day-to-day functioning. Observation of lessons of senior teachers individually or in small groups (2 nos.), meeting the students informally to learn their background and interest in learning, to see the learning facilities in the school, observing the social climate in the school, etc are some of the activities to be undertaken during this period. Each student-teacher has to engage 3 lessons individually or as Shared Practice. In Shared Practice, student-teachers will be in small groups of three members. The lessons will be divided into three parts and each student teacher will practice one of the parts by rotation in the natural classroom situation. Lesson plans need not be written with the rigidity employed for Practice Teaching lesson. The student-teachers have to maintain a detailed diary as record of the visit.

After the initiatory school experiences, a reflection session should be organized in the college. Assessment of student-teacher performance during this period will be done jointly and conveniently by the General and Optional teachers. Institutions can depute either the Optional teacher or the General teacher for organizing and assessment of school initiatory experiences.

**EDU 201.1 –Field Trip/ Study Tour:** It is an exposure trip to a place of educational or historical importance. The expected outcome includes providing situations for the student-teachers to learn and get acquainted with the process of organizing /conducting a study tour/field work and understanding the environment around. A report of tour has to be prepared by all student-teachers. The report should highlight the objectives of the tour, identification of the spot, detailed plan, execution of the plan, benefits derived from the tour, problems faced and suggestions. The Study tour can be organized by the institution at their convenience as a general program/Optional requirement, for a duration not exceeding 5 working days, and will be counted as an activity of Semester II. In case any

student fails to attend the study tour/field work due to genuine reasons they have to compensate it by undertaking a minor community work suggested by the institution and have to submit a report.

**School Internship:** - School Internship is a part of the curricular area of 'Engagement with the Field' designed to lead to the development of a broad repertoire of perspectives, professional capacities, teacher sensibilities and skills among the prospective teachers. The task during this period include:

- Practicing the process of preparation of material, teaching, assessment and evaluation,
- Participating in all the academic activities of the school under direct supervision,
- Learn to set realistic goals in terms of learning, curricular content and pedagogic practices,
- Choose, design, organize and conduct meaningful classroom activities,
- Participate in school, social and community activities in the locality associated with the school,
- Observation of and association with children in multi socio-cultural environments to understand their problems and to suggest possible remedies,
- Develop, locate, collect and maintain teaching-learning resources.

Internship in Teaching/School Internship is for a period of 20 weeks divided into two Phases of 10 weeks each, to be organized during the Third and Fourth Semesters of the Course. For school internship, the Colleges of Teacher Education and the participating Schools shall set up a mutually agreed mechanism for organizing, monitoring, supervising, tracking of internship and assessing the student - teachers. Make arrangement with at least five practicing schools for the internship as well as other school based activities of the course. These schools shall form basic contact point for all other practicum activities and related practical work during the course of the program. During the internship, a student-teacher shall work as a regular teacher and participate in all the school activities, including planning, teaching and assessment, interacting with school teachers, community members and children.

The school internship program has been arranged in phases to install effectiveness in the program. School induction program, Phase I & II of School internship has to be organized in close supervision of the colleges with effective co operation from practicing schools. After the completion of each program colleges should arrange reflection sessions in the college so that the trainee can benefit by sharing experiences and can plan and modify/regulate his/her teaching and associated activities in the next spell in the school more effectively. Planned progressive development of the behavior of the trainee phase after phase is the major purpose of arranging teaching practice in various progressive phases/stages/spells.

### **EDU-302.1: School Internship Phase I.**

School Internship/Teaching Practice for Semester III may be arranged as a single block program for a duration of 10 weeks. Student-teachers have to complete 40 Practice Lessons spread over in standards VI to XII in the Primary/Secondary/Higher Secondary Schools (Kerala State/CBSE/ICSE/ISC scheme) in their concerned Optional Subject and 2 lessons for Health & Physical Education during this period and to actively participate in all activities of the practicing school. Graduate students can

be assigned standards VI to X and for post graduates from VI to XII conveniently. Only those students having Post Graduate degree in the concerned Optional Subject are permitted to undergo Teaching Practice at Higher Secondary School level. Lesson plans/Records have to be maintained by all student-teachers. Preparation of Diagnostic Test, Achievement Test, Internship diary/Reflective Journal does not carry any marks separately but are mandatory. Appropriate remedial measures have to be adopted on the basis of the analysis of the Diagnostic test. The scores of the Achievement test should be analyzed quantitatively and qualitatively employing necessary Statistical measures. All student-teachers have to observe at least 10 lessons of peers and record the observations in the Peer Review Record.

### **EDU-401.2 : School Internship Phase II.**

School Internship/Teaching Practice for Semester IV may be arranged as a single block program for a duration of 10 weeks. Student-teachers have to complete 30 Practice Lessons spread over in standards VI to XII in the Primary/Secondary/Higher Secondary Schools (Kerala State/CBSE/ICSE/ISC scheme) in their concerned Optional Subject and 2 lessons for Health & Physical Education and to actively participate in all the activities of the school during this period. Graduate students can be assigned standards VI to X and for post graduates from VI to XII conveniently. Only those students having Post Graduate degree in the concerned Optional Subject are permitted to undergo Teaching Practice at Higher Secondary School level. Lesson plans/Records have to be maintained by all student-teachers. *Preparation of Diagnostic Test, Achievement Test, Internship diary/Reflective Journal, updating blog (1. Weekly report of school experiences including curricular and co-curricular and extension activities, 2. Innovative work during practice teaching-2 nos.), Reading and reflecting on a text in the concerned optional, undertaking a conscientization program and Field work (Minor Project/Action Research/Case Study)* have to be undertaken during this period. Appropriate remedial measures have to be adopted on the basis of the analysis of the Diagnostic test. The scores of the Achievement test should be analyzed quantitatively and qualitatively employing necessary Statistical measures. School internship Phase II has to be scheduled conveniently during the period November-January to present the student-teachers for practical examination by the end of January.

**Supervision of School Internship:** - The supervision of Practice Teaching is a joint responsibility of the Colleges of Teacher Education and Practice-Teaching Schools. Continuous observation and briefing is essential for improving the teaching skill of the novice teacher and for capacity building. The subject teachers of the school have to observe all the lessons of student-teachers and enter their suggestions in the supervision diary maintained by the student-teacher. The Teacher Educators have to observe the maximum number of practice lessons of the student-teacher. Observation of three lessons (probably at the beginning, middle and at the end of Practice Teaching) by the Optional teacher and one lesson by the General teacher is mandatory. The Principals of Colleges have to visit the practicing schools, observe lessons and monitor Practice Teaching. Assessment of Practice Teaching will be done on the basis of the Performa for assessment of teaching (see appendix). Assessment of Practice Teaching will be done jointly by the General and Optional Teachers, and School supervisors. The division of marks for various categories is as follows.

**EDU 302 - School Based Practical )**

<b>Internship in teaching Phase I</b>	<i>Taskstobecarrried out</i>	<i>Marks</i>	<i>Time allotted</i>
<b>EDU 302.1 optional subject</b>	Teaching of Optional Subjects) -40 lessons (Marks :Lesson Record -20, Peer Review Record -10, Teaching and assessment -120 (Marks allottedto : Optional Teacher-80, General Teacher-20 & School supervisor-20)	<b>150 (6 credits)</b>	<b>10 weeks</b>
<b>EDU 302.1 Physical &amp; Health Education</b>	Teaching of PE & HE classes - Total 2. Teaching -10 marks Lesson templates/record - 5 marks Health status of a student/case - 10 marks	<b>25 ( 1 credit)</b>	

**EDU 401 - School Based Practical**

<b>Internship Phase II</b>	<i>Taskstobecarrried out</i>	<i>Marks</i>	<i>Time allotted</i>
<b>EDU 401.1</b>	Minor Project/Action Research/Case Study Viva-voce	<b>40 10/(2 credits)</b>	
<b>EDU 401.2</b>	Teachingfor Optional Subjects - 30 lessons (Marks :Lesson Record -30 Teaching - 100 Viva-voce (optional) -20 Peer observation record -10 Updating blog** -25 Undertaking conscientization program*- 15 ( Marks allottedto : Optional Teacher- 80,General Teacher-20)	<b>200 (8 credits)</b>	<b>10 weeks</b>
	Teaching of Yoga& HE classes - Total 2. Teaching - 15 marks Lesson templates/record- 10marks	<b>25 (1 credit )</b>	
<b>EDU 401.3</b>	Preparation of Achievement test, statistical analysis and interpretation	<b>20</b>	
	Reflective Journal	<b>15</b>	
	Reading and Reflecting on text	<b>25</b>	
	Preparation of Diagnostic Test and Remedial measures	<b>15/ ( 3 credits )</b>	

\*\* Updating blog: Two tasks have to be undertaken: (1) weekly reporting of the experiences during internship including all curricular, co-curricular and extension activities undertaken during the week in school. (2) Up-loading in blog two innovative work/lessons segment on a single concept in the optional paper undertaken during practice-teaching.

- Conscientization program: The student-teacher has to undertake any one conscientization program in the school/community during practice-teaching and has to prepare a written report. (gender sensitivity, inclusive education, social evils around, media abuse, and the like.....)

**Assessment of School Internship/Teaching Practice:** School Internship Phase I and associated activities of Semester III will be assessed jointly by the General and Optional Teacher Educators and the School supervisor. There will be no external practical examination. The marks/grades have to be consolidated and forwarded to the university by the colleges concerned. School Internship and associated activities of Phase II (Semester IV) will be assessed jointly by the General and Optional Teacher Educators as per guidelines. However the assessment for Semester IV will be subjected to external examination through the External Examination Board constituted by the University.

### **EDU 303.1 – Community Living Camp:**

**Community Living Camp:** - All the colleges have to organize a five-day residential Community Living Camp/Citizenship Training Camp in a convenient location of their choice. It is a joint camp of Student- Teachers and their Teacher Educators in a convenient location, keeping certain formalities and following a pre/well planned time table. Learning to live together co-operatively, participation in programs for development of personal and social skills, to develop student-teacher 'social-relational sensibilities and effective communication skills, practicing democratic living, providing chances for division of labor, community work etc. are the major outcomes expected of the program. Record mentioning all the activities have to be prepared and submitted by each Student-Teacher. Community Living Camp can be organized by the institution at their convenience either during Semester III or during holidays after the Semester II University examinations, but will be credited with Semester III. Assessment of participation in Community Living Camp has to be done on the basis of an Assessment Schedule.

**Organization of the Camp:** Select a main theme related to education, culture, society and environment for each year by each institution for the community camp. The common objectives of the camp should be:

- To promote social accommodation and broaden the mental abilities of the student-teachers.
- To promote the democratic nature and involvement of the student-teacher in planning and implementing educational activities.
- To develop critical thinking about the issues related to the policies/approaches in education.
- To inquire in to the cultural, social, scientific, educational and environmental aspects of a community.
- To develop an interest to train the body and mind for a well balanced personality.



### **Themes for a Community Living Camp** (decide the theme to suit the location)

- Education and Social Change
- Education- its creative and social aspects
- Nature, agriculture, culture and education
- Education, environment and development/empowermentetc.

**Programs suggested for community living camp:** Social and educational Surveys, visit to social institutions to study their functioning, undertaking community productive work, campus cleaning/beautification, undertaking duties in the camp including preparation of food, attending classes/seminars/yoga etc., participation in games and recreational activities, mock Parliament activities etc.

### **EDU 401.1 – Minor Project/Action Research/Case Study**

The student-teacher has to take up a minor research project/Action Research/Case Study during the course. The fundamentals and modalities of this systematic study are well discussed in EDU – 08 of Semester II. The task/theme selected should be relevant socially, academically and contextually and has to be undertaken in a phased manner as per the schedule under the guidance of a supervisor (Teacher Educator). The task has to be initiated during the 1<sup>st</sup> Phase of School internship and to be completed during the 2<sup>nd</sup> Phase and credited with Semester IV. Selection of a relevant topic/problem/case, review of available literature in the area, preparation/adoption of simple tools to collect facts/data regarding the issue, analysis of the data either qualitatively or quantitatively (using simple statistics), reporting the findings are the stages to be followed. The report has to be typed/neatly handwritten, consolidated to a document of 30-50 pages. (format of the report is given as appendix). Assessment of the report will be done internally by the Supervising Teacher Educator and externally by the external practical board during the viva-voce. Viva-voce will be done by the external board. **Assessment of Report : Internal -40 marks, External – 40 marks, viva-voce-10 marks(external only)**

**EDU 401.3 – Reflective Journal:** A student-teacher generated locally standardized daily log book maintained under the supervision of the mentors is visualized as a Reflective Journal (RJ). The RJ can act as a document that carries an analytical account of the daily experiences of student-teachers during school internship. The major purpose of the RJ is reflection-on-action. During the practice-teaching the RJ depicts how different aspects of teaching are interconnected. Analysis and comments on theory-practical integration, the nature and extent of support system utilization, process analysis of success and failures management, interference and projection of future course of correction and developmental actions etc. can function as elements in the design of the reflective journal.

**ASSESSMENT :** The academic growth of the student-teacher is assessed using various assessment devices. For the theory courses, the proficiency of the student-teacher is evaluated through continuous evaluation of the candidates progress and through the semester end examination. To make continuous evaluation transparent, student-teachers should be made aware of the modus operandi of the evaluation process and the assessment criteria. The level of performance of the student-teachers is to be published periodically. The internal marks (CE ) of the Theory Courses (both Core and Optional papers) and Practical Courses of Semester I, II, III signed by the candidate shall be submitted to the

University within one week after the closing of each semester. During Semester IV the same has to be handed over to the Chairman, External Practical Board at the time of Practical examination.

**Course Evaluation/Assessment**

Sem.	External assessment (Theory-Written)	Internal Assessment
I	EDU – 01 to 05	CE of EDU 01 to 05 EDU: 101.1 to 101.3; EDU: 103.1.
II	EDU – 06 to 10	CE of EDU 06 to 10 EDU : 201.1 to 201.3 ; EDU : 202.1;
III	EDU – 11 EDU – 12 EDU- 13	CE of EDU 11 to 13 EDU : 301.1 to 301.2 ; EDU : 302.1 ; EDU: 303.1
IV	*EDU – 14 (online examination) *EDU -15 (on line examination)	EDU : 401.1 to 401.3 ( Internal & External)

- \* Online examination of EDU-14& EDU-15:** The online examination shall be conducted by the university at the end of Semester IV in selected centre's/Colleges of Teacher Education. Individual colleges can select any one centre for the online examination of their students. The duration of the examination will be one hour fifteen minutes (75 minutes) with 50 multiple choice question items. There will be four distracters to each question item and the students have to select the most appropriate choice. There will be provision for only one attempt with each question. Students cannot erase/alter their answers once attempted. All the rules with respect to online examination will be applicable here also. A question bank with sufficient multiple choice items shall be created separately for EDU-14 & EDU-15 as per the respective curriculum requirements/components. From among them a test with 50 items selected at random will be supplied to each student for EDU-14 & EDU-15. Students have to answer 50 items in 75 minutes in both the examinations.

**Tools for Assessment:** -For assessing student performances Criteria / Performa based on rubrics have to be developed for each task by the Teacher Educators to make assessment objective. A *rubric* is an explicit set of criteria used for assessing a particular type of work or performance. A rubric is a guideline for rating student performance. A rubric usually includes levels of potential achievement for each criterion, and sometimes also includes work or performance samples that typify each of those levels. Levels of achievement are often given numerical scores. A summary score for the work being assessed may be produced by adding the scores for each criterion. Rubrics are typically displayed in list or grid form. Within the rubric a series of criteria and traits are listed, usually followed by a Rating Scale.

## **Modes of Assessment :**

- A. Theory:**(50 marks each)-Theoretical discourses of Perspectives in Education (Core) and Curriculum and Pedagogic Courses (Optional papers) for semester I, II& III will be assessed externally through end semester examinations of the University.

**Practical work related to theory papers-CE-(25 marks each) - (EDU-01 to 15)**Continuous Evaluation (CE) of Practical Work related to theory papers will be done by the teacher educator concerned internally as per the guidelines in each case. The Practical Work (CE) coming under Theoretical Discourses EDU 01 to 05 of Semester I, EDU 06 to 10 of Semester II and EDU 11 to 13 of Semester III will be subjected to internal assessment only where as EDU 14 & 15 will be assessed both internally and externally.

### **B. Practical Courses:-**

#### **1. Practical Courses for Internal assessment.**

Continuous and comprehensive assessment of the College, School & Community Based Practical for EDU 101 & EDU 103 of Semester I , EDU 201,& EDU 202 of semester II , EDU 301, EDU 302 & EDU 303 of Semester III and EDU 401 of semester IV will be done by the teacher educators concerned internally on the basis of the criteria fixed for the purpose. The internal examiner will assess the performance of the student-teachers and award marks and respective grades.

Internal assessment of Initiatory school experiences of Semester II and Practice Teaching in Semester III & IV will be carried out jointly by the General & Optional teachers and school Supervisors.

*The marks and respective grades of internal assessment (CE & Practical Courses) during each Semester have to be forwarded to the University by the institutions within one week after closing of the semester, both Online and manual/printed. There will be no external assessment for the practical done (CE & other practicals) during Semester I, II & III. The marks/grades of Semester IV will be handed over to the Chairman, External Examination Board by the institutions at the time of practical examination.*

#### **2. Practical Courses for External Assessment**

Practical work related to EDU 401.1, EDU 401.2,& EDU 401.3 of Semester IV will be subjected to external assessment by an External Examination Board constituted by the University. The external examiner for Physical Education will assess the Records related to Physical and Health Education. There will be no external assessment of Physical and Health Education classes by the external examiner. The present practice of appointing Zonal Boards will be continued. The board members will be appointed by the University on the basis of existing norms.

**The practical Examination by the External Board will be conducted in two Phases.**

- **Phase I – Practical Examination of Curriculum and Pedagogic courses (optional) and Health and Physical Education (during mid-January-February).**
- **Phase II – Evaluation of Minor Project work/Action Research/Case study and viva-voce - ( during March)**

### Scheme of Assessment Practical Courses of Semester IV by External Practical Board

	Examiners	Subject & Item for assessment	Marks
<b>Phase I (January/February)</b>	<b>Chairman &amp;External Examiners for curriculum and pedagogic courses/ Optional subject &amp; Examiner for PE</b>	Curriculum & Pedagogic courses	
		EDU-401.2 : Record of Teaching- Teaching	30 100
		Viva-voce	20
		Peer observation record	10
		Record of blog uploading	25
Record of conscientization	15		
		EDU-401.3 : Achievement Test	20
		Reflective Journal	15
		Reading & Reflecting on text	25
		Diagnostic test	15
		EDU-15- MCQ Test battery	25/300
		EDU-401.2 : Yoga and Health Education. Record of Practice teaching & viva	25
<b>Phase II (March)</b>	<b>Chairman &amp;External Examiner for Perspectives in Education/Core Paper.</b>	EDU – 401.1 : Minor Research Project/Action Research/Case Study – Report.	40
		Viva-voce (external valuation )	10
		EDU-14 MCQ Test battery	25

**Zonal Board** : - The Zonal Board will consist of a Chairman, Subject expert for each Optional Paper, one Subject expert for Core Papers, one Subject expert for Physical and Health Education appointed by the university. The zonal board will schedule its examination in two phases.

During Phase I the team members consisting of the Chairman, examiners of Optional subjects and Physical education will visit the colleges as per schedule of examination fixed by the chairman in consultation with respective colleges and assess the performance of the student-teachers as per the criteria already fixed. The subject expert for the Optional Paper will conduct Practical Examination for the concerned Optional. If the number of candidates in an Optional subject is more than 20, an additional examiner can be appointed. The board shall observe and assess the teaching competency (Optional only) and other Practical Work of all student-teachers and conduct a Viva-Voce based on the subject. The members of the external board will assess the performance of the student-teachers in their concerned subject and award marks and respective grades for the maximum marks specified. Each Zonal Board will visit maximum 3 to 4 institutions.

During Phase II the team consisting of the Chairman and examiner for Perspectives in education (core papers) will schedule external examination and will assess the project work/case study/action research and conduct a viva-voce on the project.

**Duties of Practical Board:** The marks and respective grades of internal assessment of Practical Courses of Semester IV will be handed over to the Chairman, External Practical Board at the time of

Practical Examination by the Colleges concerned. The members of the External Practical Board will assess the Records and performance of all the student-teachers in their concerned subject using the assessment criteria followed in internal assessment and hand over the marks and respective grades to the Chairman of the Board. The average of the internal and external assessment has to be taken as the final score. In case, the total marks awarded by the internal and external examiner for a subject ( Minor Project/Action Research/Case Study, Physical Education, and Practice Teaching and related activities ) has a difference more than 10% of the total marks, the Chairman will examine the case and settle the variation. In such cases the decision of the Chairman will be final. The Chairman will check randomly/verify any case, if discrepancies are noted. All the Examiners, appointed by the University including the Chairman have to be present in the centre on all the days on which Practical Examination is conducted.

**Compilation of marks :** The average marks and respective grades of the internal and external assessment has to be computed by the Chairman of the Board and forwarded to the Co-ordinating Chairman along with internal marks handed over by the colleges and external marks assigned by the board after the completion of Phase II examination.

**Co-ordinating Chairman:** - A Co-ordinating Chairman will be appointed by the University who will co-ordinate the work of four zonal boards. The Coordinating chairman has to randomly check the assessment of Zonal Boards and make corrections, if necessary. The final Mark Lists of Practical Examination (average of internal and external, internal marks handed over by colleges, and external marks awarded by the board) have to be forwarded to the Controller of Examination.

**Number of Zonal boards:** - The University will constitute the required number of Zonal Boards to complete the Practical Examination in the stipulated time (in a duration of 10 to 15 days). All qualified teacher educators have to compulsorily take up appointment as External Examiner.

**Timing of Practical Examination:** - Practical examination will be scheduled and carried out simultaneously in all the colleges in a period of 10 to 15 days. The Phase I has to be scheduled during mid January- February. Phase II has to be scheduled during March. The duration of the Practical Examination in an institution will be two days for a strength of 50 students (one unit) for Phase I & Phase II. Additional days will be provided depending on the strength of the institution.

**Scheme of Assessment: Theory**

**Semester I (Semester-end examination)**

Code	Paper	Duration	Marks
EDU 01	Knowledge and Curriculum: Philosophical and Sociological Perspectives.	2 hours	50
EDU 02	Developmental Perspectives of the Learner.	2 hours	50
EDU 03	Technology and Communication in Education	2 hours	50
EDU 04.1-13	Theoretical base of ..... Education	2 hours	50
EDU 05.1-13	Pedagogic Content Knowledge Analysis:...	2 hours	50
<b>Total</b>			<b>250</b>

04.1-12 & 05.1-13– Malayalam, English, Hindi, Sanskrit, Arabic, Tamil, Mathematics, Physical Science, Natural Science, Social Science, Geography, Commerce, Home Science.

**Scheme of Assessment – Semester II (end Semester examination)**

Code	Paper	Duration	Marks
EDU 06	Education in Indian Society.	2 hours	50
EDU 07	Perspectives of Learning and Teaching.	2 hours	50
EDU 08	Assessment in Education.	2 hours	50
EDU 09.1-13	Curriculum and Resources in Digital Era:.....Education.	2 hours	50
EDU 10.1-13	Techno-Pedagogic Content Knowledge Analysis:.....	2 hours	50
<b>Total</b>			<b>250</b>

09.1-13& 10.1-13 - Malayalam, English, Hindi, Sanskrit, Arabic, Tamil, Mathematics, Physical Science, Natural Science, Social Science, Geography, Commerce, Home Science.

**Semester III(Semester-end examination)**

Code	Paper	Duration	Marks
EDU 11	Developmental Perspectives in Education.	2 hours	50
EDU 12	Learner in the Educational Perspective.	2 hours	50
EDU 13	Emerging Trends and Practices in ..... Education.	2 hours	50
<b>Total</b>			<b>150</b>

04.1-13 & 05.1-13 – Malayalam, English, Hindi, Sanskrit, Arabic, Tamil, Mathematics, Physical Science, Natural Science, Social Science, Geography, Commerce, Home Science.

**Semester IV(Semester-end examination : online examination)**

Code	Paper	Duration	Marks
EDU 14	Advanced Studies: Perspectives in Education.	75 minutes	50
EDU – 15	Advanced Studies : Curriculum and Pedagogic Courses - .....Education.	75 minutes	50
<b>Total</b>			<b>100</b>

**Pattern of Question Papers ( Semester I , II& III )**

Type of Question	Number	Marks	Time
Multiple Choice	5	5( 1 markeach)	5 minutes
One word/Sentence	5	5 (1 mark each)	5 minutes
Very Short Answer	5	10 (2 marks each )	20 minutes
Short Answer	4 out of 6	20 ( 5 marks each )	60 minutes
Essay	1 out of 2	10 marks	30 minutes
<b>Total</b>	<b>20</b>	<b>50</b>	<b>120 minutes</b>

**Pattern of Question Paper – Semester IV (online examination)**

Type of Question	Number	Marks	Time
Multiple Choice	50	50( 1 markeach)	75 minutes

**Grading System (Seven Point Scale) :Grading:** Grading is the process of applying standardized measurements of varying levels of comprehension within a subject area. Assigning letters for indicating the performance of students in each paper/area by giving due weightage according to the scale adopted. A seven point scale is suggested here for the grading purpose and Indirect Grading shall be used. In Indirect Grading the students are assessed using conventional marking mode and the marks awarded for each subject/area are converted into letter grades as per the weightages assigned. Marks for each Theory Courses (EDU-01 to 15) and Related Practical Work (CE), Practical Courses (EDU 101, 102, 103, 201, 202, 203, 301, 302, 303 & 401) will be assessed and the marks will be converted into letter grades in a seven point scale. Then find the Grade point Average (GPA). The overall performance of the students will be assessed by finding the Cumulative Grade Point Average (CGPA) and converting this CGPA into letter grades following the grade range in this seven point scale.

Intervals of marks in %	Grade	Grade Point	Grade Range
90 and above	A+	7	6.30 – 7.00
80 – 89	A	6	5.60 – 6.29
70 – 79	B+	5	4.90 – 5.59
60 – 69	B	4	4.20 – 4.89
50 – 59	C+	3	3.50 – 4.19
40 – 49	C	2	2.80 – 3.49

Below 40	D	1	0.01 – 2.79
----------	---	---	-------------

**Grade Point Average (GPA):** GPA is the value obtained by dividing *the sum of the weighted grade points obtained by a student in various subjects in a semester* by *the total number of credits taken by him/her in the semester*. The value shall be rounded off to two decimal places.

$$GPA = \frac{\sum WGP}{Total\ Credit}$$

#### **Cumulative Grade Point Average (CGPA)**

**Cumulative Grade Point Average (CGPA):**CGPA is the value obtained by dividing (*the total credits for each semester*) X (*Sum of GPA for all the semesters*) by (*the total credits for all the semesters*). The value shall be rounded off to two decimal places. Then,

$$CGPA = \frac{GPA\ of\ Semester\ I + II + III + IV}{4}$$

**Grading of a Candidate:** For a pass in the examination the candidate should have obtained a minimum of 50% marks (C+ grade) in aggregate in each semester with a separate minimum of 40% marks in each Theory Paper, 40% when theory and CE are taken together and 50% for School Internship of Semester III, IV and 50% marks for Minor research project/Action Research/Case Study. There is no minimum for CE and other related Practical Courses. The overall grade of the Course will be computed in terms of CGPA and respective letter grades will be awarded. The minimum grade required for a pass is C+ in aggregate.

#### **Curriculum Transaction**

##### *Strategies to be adopted*

- *The strategies proposed to be adopted in the transaction of the B. Ed. curriculum include Lecture-cum-Discussion/Narration, Co-operative and Collaborative Learning, Focused Reading and Reflection/Intellectual Discourses, Observation-Documentation-Analysis, ICT Enabled Learning/Virtual Tours, Requirement Based Learning / Individualized Learning, Multi Disciplinary Learning, Meaningful Verbal Expression, Seminars, Case Studies, Workshop /Dramatization / Miming, Self Learning, Problem Based Learning, etc. With a view to move away from theoretical discourses through lectures alone, the student teachers will be required to be engaged in these various kinds of learning experience/modes of learning engagements. These strategies have to be initiated by the mentor to guide the student teachers to go through the processes to achieve the expected outcomes. Many probable instructional strategies have been included with each content in the curriculum, and the teacher educators have to adopt the most suitable ones to make the instruction effective.*

*Mental Process :- the sequence of mental experiences-pedagogical-instructional-experiential contexts felt/received/undergone by the student-teacher during/as a result of various interactions viz. Intellectual dilemma, Cognitive challenge, Controlled listening, Disequilibrium and accommodation, Reflective intellectual discourses, Contemplative self*



*expression, Verbal and conflict management, Narrative expression of self experiences, Field based mental imagery formation, Collective expression of consensus point and the like constitute the learning process.*

**The mental processes involved in the learning of various subjects are presented below in hierarchical order.**

1. *Retrieves/ recollects/ retells information*
2. *Readily makes connections to new information based on past experiences and formulates initial ideas/ concepts*
3. *Detects similarities and differences*
4. *Classifies/ categorizes/ organizes information appropriately*
5. *Translates/ transfer knowledge or understanding and applies them in new situations*
6. *Establishes cause- effect relationship*
7. *Makes connection/ relates prior knowledge to new information/ applies reasoning and draw inferences*
8. *Communicates knowledge/ understanding through different media*
9. *Imagines/fantasizes/ designs/ predicts based on received information*
10. *Judges / appraises/ evaluates the merits or demerits of an idea/ develops own solutions to a problem*

The list of strategies, learning processes etc are inconclusive. Teacher Educators have the freedom to adopt various strategies, learning process, assessment techniques in addition to the one suggested in the Syllabus grid. But each institution/ teacher educator has to ensure that activities/ strategies suggested in the syllabus grid are followed during transaction of curriculum.

#### **Academic Calendar**

A copy of the Academic Calendar specifying the schedule of activities and examination during the course is given in appendix

#### **\* Orientation of the Curriculum (Academic Calendar Semester I)**

The time provided for General Orientation is one week. The purpose of General Orientation for fresh entrants to the B. Ed. Course is to spell out to the student teachers its academic and professional aspects, and also the expectations of the institution from them in achieving the quality and standards of the professional course.

Scope of the orientation:- When the student teachers join a teacher education institution, they are anxious to know how to grapple with the problems and situations that are new to them and appear to be challenging. Therefore, the orientation program should be organized at the beginning and be spread over the whole of the first week, as it will lay the foundation of a successful course. It should cover the following areas:

#### **1. General Orientation :**

- a) **About Teaching as a Profession**
- b) **About the Institution**
- c) **About the Faculty**

2. ***About the B. Ed. Program***

- a) **Theoretical Discourses and Related Practical Work (CE)**
- b) **School internship/Practice Teaching**
- c) **Practical Courses / Practicum (College/School/Community Based)**
- d) **Assessment and Evaluation (both Internal and External)**
- e) **Curricular and Co curricular Activities in the Institution.**

**Composition of the Curriculum**

The curriculum of various subjects for B Ed are presented in the order Semester I, Semester II, Semester III & Semester IV. Perspectives in Education (EDU01-03, 06-08, 11 & 12, 14 ) are Core papers & Curriculum and Pedagogic Courses (EDU 04 –05, 09-10, 13, 15) are Optional subjects. The components of the curriculum have been presented in the following order.

- **Title of the Subject**
- **Objectives of teaching the Subject**
- **Contents included in the subject**
- **Syllabus Grid**
- **References**

The syllabus Grid contains four columns

1. **Learning Outcomes – what the student-teacher may achieve.**
2. **Contents/Concepts and allied matters – concepts and knowledge of functional dimensions of concepts.**
3. **Strategies/Approaches recommended for transaction – Initiated by the mentor.**
4. **Assessment and Evaluation – to assess the progress of the novices.**

**Perspectives of Education (core Papers).**

Nine areas/papers (EDU – 01, 02, 03, 06, 07, 08, 11, 12 and 14) have been included under this heading in order to develop among the student-teachers a realistic outlook about education and teacher in the Indian society. The objectives of this program include:

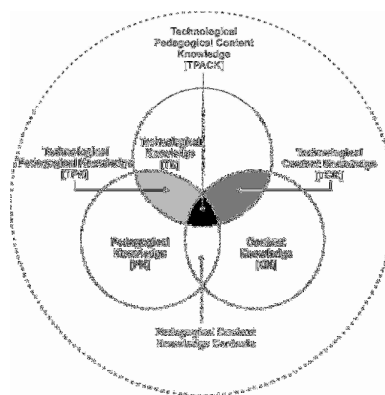
The prospective teacher

- Understands the meaning, significance and perspectives of education in the socio-cultural context.
- Understands the history, current issues and challenges of Indian Education and becomes capable of solving various problems of the society.

- Understands the developmental processes and needs of children and adolescents, the role of teacher in facilitating them.
- Acquaints with prominent Psychological principles, theories of development and learning, and allied matters and make use of them in educational contexts.
- Understands the assumptions of ICT, Assessment and Evaluation, Management, Environment etc and makes use of them in practical life and classroom instruction.
- Acquires democratic and social values of an ideal teacher and develops skills and competencies in teaching and classroom management.

### Curriculum and Pedagogic Courses (Optional subjects)

Theoretical Base of the optional subject, (Techno) Pedagogic Content Knowledge Analysis, Curriculum and Resources in Digital Era, Emerging Trends and Practices & Advanced Studies in the subject area are the Optional Papers included under Curriculum and Pedagogic courses. Due consideration has been given to incorporate the latest trends in learning and pedagogical theories that touches various domains of the subject concerned. Keeping in mind the local-cultural-historical-environmental and educational dimensions of Kerala an earnest effort has been undertaken to incorporate the spirit of the 21<sup>st</sup> century knowledge based economic circumstances and its divergent demands in the teacher education process through the respective course work of the optional paper. A clear demarcation of the methodology and the corresponding pedagogical analysis papers with respect to the respective optional subjects have been worked out which help for meaningful transaction of the optional curriculum. Revamping the concept of Pedagogical analysis to Pedagogic Content Knowledge (PCK) and its contemporary version of Techno-Pedagogic Content Knowledge (TPCK) Analysis have been accommodated to give a practical face to the curriculum. The following illustration may make things more clear.



The objectives of optional education include:

- To make the novice teacher understand the scope and nature of teaching the subject at different levels of learning.
- To introduce the challenging career of a teacher with a futuristic perspective, as an agent of social change.

- To develop practical field based skills and experience in resource development and learning experience designing while transacting the curriculum.
- To provide the required research based learning experience so as to undertake a habit of self development through inquiry and investigation,
- To enrich the vision and capabilities of prospective teachers as reflective practitioners during and after the pre-service education.
- To design instructional and learner support mechanism-print, non-print, electronic and digital-appropriate for the learner needs and contextual requirements.
- To get a field based understanding of theories and principles of pupil assessment and evaluation.
- To undertake a self-empowerment initiative in transacting the curriculum from a Techno-Pedagogic content Knowledge perspective.
- To identify the Entrepreneurial opportunities of futuristic significance associated with the subject.
- To develop a neo-humanistic attitude among the student-teachers in the light of Science-Technology-Society/Culture-Environment interaction paradigm.

## **SEMESTER – I**

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

### **Perspectives in Education/Core Subjects:**

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

### **Curriculum and Pedagogic Courses/Optional subjects:**

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

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

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

### **Objectives:**

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

### **Contents:**

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

### **UNIT I : TEACHER AND EDUCATION ( 15 hrs)**

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

**REFERENCES :**

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

**UNIT II: PHILOSOPHICAL PERSPECTIVES OF EDUCATION( 30 hrs)**

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

**REFERENCES :**

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

**UNIT III: SOCIOLOGICAL PERSPECTIVES OF EDUCATION ( 30 hrs)**

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



## REFERENCES:

- Agarwal J.C.( 19991). Theory and [practices of education. Vikas publishing house Pvt Ltd. New delhi.
- Dash BN( 2002). Teacher and education in the emerging Indian Society. Vol.2. Neelkamal publication. Hydrabad.
- Arora G.L & Pranati Panda.Fifty Years of Teacher Education in India (Post Independence Developments):NCERT
- Chinara B.(1997). Education and Democracy, APH. New Delhi.
- John, Zeepa Sara. (2012) Philosophical and Sociological Foundations of Education. Chennai: Almighty Book Company,
- Mukherji SM.(1966). History of education in india, charya book depot, baroda..
- <http://www.mu.ac.in/>
- <http://www.yazour.com/>

### UNIT IV: EDUCATION AND SOCIAL CHANGE (20 hrs)

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

## REFERENCES :

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

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

## EDU - 02: DEVELOPMENTAL PERSPECTIVES OF THE LEARNER

### Objectives: To enable the student teacher:

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

### Contents:

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

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

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

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

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

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

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

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

### Reference

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

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

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

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

### Reference

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

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

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

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

### Reference

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

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

#### Websites

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



## EDU - 03 : TECHNOLOGY & COMMUNICATION IN EDUCATION

(Theory 60 hours+ Practical 30 hours)

### Objectives

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

### Contents :

- Unit I : Introduction to Educational Technology (Theory 20hours & Practical 2 hours)  
 Unit II : Communication Technology (Theory10 hours)  
 Unit III : ICT in Education (Theory 20 hours & Practical25 hours)  
 Unit IV : Students Safety on the net (Theory10 hours& Practical 3 hours)

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

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

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

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

### Unit II. Communication Technology (Theory 10 hours)

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

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

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

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

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

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

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

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

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

### Suggested Readings

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

## Web Resources

- [www.avaudiovisualaids.blogspot.com/2010/10/av-aids-in-teaching.html](http://www.avaudiovisualaids.blogspot.com/2010/10/av-aids-in-teaching.html)
- [www.slideshare.net/pria87/audio-visual-aids](http://www.slideshare.net/pria87/audio-visual-aids)
- [www.tecweb.org/eddevel/edtech/teleconf.html](http://www.tecweb.org/eddevel/edtech/teleconf.html)
- [www.slideshare.net/diputr/fiacs-flanders-interaction](http://www.slideshare.net/diputr/fiacs-flanders-interaction)
- <https://moodle.org/>
- [www.ehow.com/list\\_7640133\\_legal-ethical-issues-technology.html](http://www.ehow.com/list_7640133_legal-ethical-issues-technology.html)
- [www.rogerdarlington.co.uk/Internetethics.html](http://www.rogerdarlington.co.uk/Internetethics.html)
- [www.thefreedictionary.com/computer+simulation](http://www.thefreedictionary.com/computer+simulation)
- [www.jite.org/documents/Vol2/v2p001-013-59.pdf](http://www.jite.org/documents/Vol2/v2p001-013-59.pdf)
- [www.e-learningconsulting.com/consulting/what/e-learning.html](http://www.e-learningconsulting.com/consulting/what/e-learning.html)
- [www.cemca.org/e-learning\\_guidebook.pdf](http://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

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

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

## UNIT 2: NATURE AND DEVELOPMENT OF MALAYALAM

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

### UNIT 3 AIMS AND OBJECTIVES OF TEACHING MALAYALAM

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

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

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

	<ul style="list-style-type: none"> <li>• Multiple Intelligence Theory</li> <li>• Emotional Intelligence Theory</li> <li>• Critical Pedagogy - Paulo Freire</li> <li>• Meta Cognition</li> <li>• Integration of new theories and concepts in teaching Malayalam</li> </ul>	Comparative notes on new theories with the help of reference books	
--	---	--	--

## **EDU – 05. 1 : PEDAGOGIC CONTENT KNOWLEDGE ANALYSIS : MALAYALAM.**

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

### **Objectives :**

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

### **Contents :**

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

### Unit 1: Introduction to Pedagogic Content Knowledge analysis

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

### UNIT 2: PLANNING AND DESIGNING OF LESSON TEMPLATES

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

### UNIT 3: ESSENTIAL REQUIREMENTS OF TEACHING MALAYALAM

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To understand, practice and master basic language skills, 2. Communication skills etc.	<ul style="list-style-type: none"> <li>• <b>Acquisition Language Skills and Micro teaching</b></li> <li>• 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</li> </ul>	Preparation of a test for HS/HSS students to find out the common errors in reading and writing Malayalam	<ul style="list-style-type: none"> <li>• Appropriateness of Practicum</li> <li>• Effectiveness of the test</li> <li>• Participation of students</li> <li>• Suitability of prepared lessons</li> </ul>

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

#### Unit 4 Resources in Teaching and Learning of Malayalam

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

		class room Preparation of audio lessons	
--	--	--	--

**References: for all Semesters.**

**Prof. MK Prasad**

**Bhashapadanavum Bhodhana shaastravum**

**Bhashapadanavum Sidhaanthangalum**

**Divaswapna**

**EnganeMalayalattilBlogam**

**Gadyarachana**

**Gadyashilpam**

**Kerala Panineeyam**

**KuttikalePadanathilSahayikkam**

**MalayalaBhashaBodhanam**

**MalayalaBhashadyapanam**

**MalayalaKavithapadhanamgal**

**MalayalaSahithyaCharithram**

**MalayalaSahithyaCharithram**

**MalayalaSahithyaNiroopanam**

**MalayalaSahithyaVimarshanam**

**Mathrubhashabhodhanam:**

**Micro teaching**

**MumbilullaJeevitham**

**Nalla Malayalam**

**NammudeBhasha**

**Padyapadhathi sidhaantham**

**Kerala Shaasthrasaahitya Parishad**

**Dr.SreeVrinda Nair N**

**Dr.SreeVrinda Nair N**

**GijubhaiBhadeka**

**Baburaj PM**

**Dr.CK Chandrasekharan Nair**

**CV VasudevaBhattathiri**

**AR RajarajaVarma**

**PK Abdul Hammed Karassery**

**CV VasudevaBhattathiri**

**Dr.KSivarajan**

**K Sachidanandan**

**Dr. KalpattaBlakrishnan**

**PK Parameswaran Nair**

**Dr. PanmanaRamachandran Nair**

**Dr. SukumarAzheekode**

**Allen,D& Ryan, K**

**J Krishnamoorthi**

**CV VasudevaBhattathiri**

**EMS Namboothiripad**

**Dr. Ravisankhar S. Nair**

**DC Books Kottayam**

**DC Books Kottayam**

**National Book Trust**

**DC Books, Kottayam**

**Kerala Bhasha Institute**

**Kerala Bhasha Institute**

**DC Books, Kottayam**

**DC Books, Kottayam**

**Kerala Bhasha Institute**

**Calicut University**

**Mathrubhoomi Books**

**Kerala Bhasha Institute**

**Sahithya Academy**

**Current Books, Kottayam**

**DC Books, Kottayam**

**Adison Wesley, London**

**DC Books, Kottayam**

**DC Books, Kottayam**

**Kerala Bhasha Institute**

**Kerala Bhasha Institute**



**ParivarthanonmughaVidhyabhyabyasam  
PravanathakalumReethikalum.  
PrayogikaVyakaranam  
PurogamanaVidyabhyaasachinthakal  
Thettillatta Malayalam  
TirakkadhaRachana – KalayumSidhanthvum  
Toto Chan  
ShaasthrasaahityaParishad  
Tuition to Intuition  
Ucharanamnavan  
VidhyabhyasathilViplavam  
Vidyabhyaasachinthakal  
VidyabhyasaParivarthanattinoruAmugham  
VyakaranaMitham**

**Guru NithyachaithanyaYathi  
Bindhu,C.M  
Irinjayam Ravi  
PV Purushothaman  
Prof. PanmanaRamachandran Nair  
Jose K Manuel  
TetsukoKoriyoNagi  
  
Dr. KN Anandan  
Dr. VRPrabodhachandran  
Osho  
AsisTharuvana  
  
SheshgiriPrabhu**

**NarayanaGurukulam, Varkala  
Scorpio, Calicut**

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

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

#### **Online Resources**

<http://ml.wikipedia.org>  
<https://www.facebook.com/groups/144983732246185>  
<https://www.facebook.com/groups/paribhasha>  
<http://www.keralasahityaakademi.org/>  
<http://malayalambloghelp.blogspot.com/>  
<http://www.topsite.com/best/malayalam>  
<http://malayalam.kerala.gov.in/index.php>  
[http://malayalaaikyavedi.blogspot.in/2015/04/blog-post\\_61.html](http://malayalaaikyavedi.blogspot.in/2015/04/blog-post_61.html)  
<http://www.facebook.com/pages/മലയാളപഠനബോധന-സഹായി/628705850559130?ref=hl>  
<http://bloghelpline.cyberjalakam.com/>  
<http://bogsahayi.blogspot.in/>

## EDU –04.2 : THEORETICAL BASE OF ENGLISH EDUCATION.

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

### Objectives :

The student teacher :

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

### Contents

**Unit 1: General Introduction to English Language Teaching and Learning**

**Unit 2: Nature and Development of English Language**

**Unit 3: Aims and Objectives of Teaching English**

**Unit 4: Methods and Strategies of Teaching English**

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

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

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

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

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

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

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

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

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

## References

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

## Online resources:

- Activities for developing skills <http://www.teachingexpertise.com/articles/activities-for-developing-skills-1106>
- Current trends in Teaching Listening and Speaking by Jack. C. Richards [www.oup.com/elt](http://www.oup.com/elt)
- Learning Brain-based way <http://languagelab.com.sg/faq.php>
- The Essentials of Language Teaching <http://www.nclrc.org/essentials/index.htm>
- Teaching English to Speakers of Other Languages by M.S. Thirumalai. <http://www.languageinindia.com/april2002/tesolbook.html>
- Task-Based Language Teaching and Learning: An Overview [http://www.asian-eft-journal.com/Sept\\_06\\_ro.php](http://www.asian-eft-journal.com/Sept_06_ro.php)
- BBC World Service: Learning English <http://www.bbc.co.uk/worldservice/learningenglish/index.shtml>
- Dave Sperling's ESL Café <http://www.eslcafe.com/>
- FRET (Free Resources for English Teaching) <http://www.english-teaching.co.uk/>
- Web English Teacher <http://www.webenglishteacher.com/>

## **EDU. 05.2 : PEDAGOGIC CONTENT KNOWLEDGE ANALYSIS: ENGLISH**

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

### **Objectives :**

The student teacher:

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

### **Contents :**

**Unit I : Introduction to Pedagogic Content Knowledge (PCK)**

**Unit II : Planning and Designing of Lesson Templates**

**Unit III : Essential Requirements for Teaching of English**

**Unit IV : Resources in Teaching and Learning of English**

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

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

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

### Unit 2: Planning and design of lesson templates (25 hrs)

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

		Practice under supervised guidance. Task-directed discussion and Applied exercises	
--	--	---	--

### Unit 3: Essential requirements for teaching of English

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



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

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

#### References

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

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

#### Online references

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

## **EDU - 04.3: THEORETICAL BASE OF HINDI EDUCATION**

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

### **Objectives**

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

### **CONTENTS**

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

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

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
1. Student teachers acquaint with the importance and bases of language 2. Grasp the process of teaching-learning and gain an outlook of teaching profession 3. Analyze learning environment for Hindi instruction	<ul style="list-style-type: none"><li>• 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</li></ul>	Meaningful verbal presentation Brain storming Makes student recall qualities of teachers whom they admire Narration, anecdotes of lives of teachers	<ul style="list-style-type: none"><li>• Case analysis presentation</li><li>• Contribution in debate on qualities of teacher and Hindi as second language</li><li>• Performance in classroom discussions</li></ul>

<p>4. Adapt the changing structure of the concept of classroom instruction</p>	<ul style="list-style-type: none"> <li>• 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</li> <li>• Continuing Professional Development (CPD): Teacher as professional-- Duties and responsibilities; various roles: knowledge worker, facilitator, scaffolder, mentor, social engineer, counselor, techno pedagogue, reflective practitioner</li> <li>• Problems and difficulties confronted by teachers and learners in Hindi instruction</li> <li>• Learning environment</li> <li>• Class room as a social laboratory, Classroom without walls(CWW),Blending of synchronous and asynchronous mode of learning,Virtual learning environment(VLE)</li> </ul>	<p>who served as role models Views films related to teachers</p>	
--	---	--	--

**Unit: 2 Nature and Development of Hindi Language (10 Hrs + 7 Hrs)**

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

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

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. Generate knowledge about the aims and objectives of teaching Hindi 2. Endow with the significance of taxonomy of instructional objectives in Hindi education 3. Familiarize with varied psychological and learning theories	<ul style="list-style-type: none"> <li>• Aims of Teaching Hindi: linguistic, literary, utilitarian and socio-cultural</li> <li>• General objectives of teaching Hindi, Objectives of teaching Hindi at different levels (primary, secondary and higher secondary)</li> <li>• Objectives of NCERT, NCTE</li> <li>• Framing curricular objectives in teaching Hindi</li> <li>• Role of Information and Communication Technology (ICT) in Hindi learning</li> <li>• Bloom's taxonomy of Instructional objectives - Revised form: - (Anderson &amp; Krathwohl) with special reference to 'Create' objective - Technology integrated taxonomy - Collins et al. - Higher Order Skills --- Analysis, Synthesis, Evaluation and its applications</li> <li>• 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</li> </ul>	General discussion Demonstration Analytical study Group investigation Focus group discussion	<ul style="list-style-type: none"> <li>• Assessing the level of involvement in class activities</li> <li>• Comparative analysis - Bloom's taxonomy of Instructional objectives traditional with revised one</li> <li>• Monitor the ability to compare &amp; study critically on various theories, methods and approaches</li> </ul>

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

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
<p>1. Compete with different instructional methods suited for teaching Hindi</p> <p>2. Become proficient in selecting most appropriate teaching methods, techniques and strategies in varied context and content</p> <p>3. Familiarize with various forms of discourses for language learning</p>	<ul style="list-style-type: none"> <li>• Phases of teaching ,Teaching tactics, Techniques of teaching – Drill, Brain storming, Role play, Review, Dramatization, Buzz session, simulation, Quiz session</li> <li>• 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</li> <li>• Instructional strategies – Co-operative and</li> </ul>	<p>Dramatization</p> <p>Debate</p> <p>Role Play</p> <p>Buzz session</p> <p>Quiz session</p> <p>Problem solving method</p> <p>Project method</p> <p>Comparative &amp; critical study on various methods and approaches</p> <p>Learning through various discourses</p>	<ul style="list-style-type: none"> <li>• Report presentation &amp; verification</li> <li>• Monitor the ability to distinguish between similar concepts, phases</li> </ul>

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

#### References – for all Semesters.

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



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

**Online Resources :**

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

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

## EDU – 05.3 : PEDAGOGIC CONTENT KNOWLEDGE ANALYSIS – HINDI.

(Theoretical discourses-60 & CE – 30 hours)

### Objectives

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

### Contents

**Unit : 1 Nature and Scope of Pedagogical content knowledge analysis**

**Unit: 2 Instructional Planning and Designing Lesson Templates**

**Unit: 3 Essential Requirements of Teaching Hindi Education**

**Unit : 4 Instructional Resources in Teaching and Learning of Hindi**

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

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

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

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

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

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

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

**Unit : 4 Instructional Resources in Teaching and Learning of Hindi (15 Hrs + 8 Hrs)**

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

## **EDU – 04. 4 : THEORETICAL BASE OF SANSKRIT EDUCATION**

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

### **OBJECTIVES :**

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

### **CONTENTS :**

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

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

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
<p>1. To develop perspectives on the study of Sanskrit in the global context.</p> <p>2. To acquire theoretical knowledge and skills in the learning of Sanskrit language.</p>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• 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.</li> </ul>	<p>Meaningful Verbal expression.</p> <p>CAI</p> <p>Explanations and Narrative Demonstrations etc.</p> <p>Develop suitable environment for communication.</p> <p>Supply materials for loud reading.</p> <p>Comprehensions and paragraphs. Written competitions.</p> <p>Listening stories and poems, summarise and recite.</p> <p>Comparisons with the learning of English as second language, Malayalam as first language.</p>	<ul style="list-style-type: none"> <li>• -Portfolio and performance.</li> <li>• -Analyze the performances-</li> <li>• -Participant observation-</li> <li>• Individual assessment-Prepare power point presentation in the given topic.</li> <li>• -Participant observation.</li> <li>• Observation.</li> <li>• *CE-Seminar-5-marks.</li> </ul>

		Presentation. Lecture method. Explanation. Narration. Group discussion and Presentation.	
--	--	---	--

**UNIT II: NATURE AND DEVELOPMENT OF SANSKRIT LANGUAGE[12Hours+7Hours]**

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
1. To develop an understanding of the nature of language system and to understand the role and importance of Sanskrit and its cultural background. 2. To analyze and prepare a report on the learning of Sanskrit at school level. 3. To familiarize with the psychological theories and its application of teaching Sanskrit.	<ul style="list-style-type: none"> <li>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.</li> <li>Problems related to Sanskrit teaching at School level.</li> <li>Psycho linguistic theories and its principles in teaching Sanskrit with special reference to</li> </ul>	Meaningful verbal expressions. Lecture cum discussions. Narrative expressions. Collection of Literature. Questionnaire to teachers and students. Lecture cum discussions.	<ul style="list-style-type: none"> <li>Role performance.</li> <li>Individual assessment.</li> <li>References.</li> <li>Presentation of report and Participant observation.</li> <li>Observations.</li> <li>Analyze the performance-Power point presentation.</li> <li>Participant observation-</li> <li>CE-Practicum-10 marks.</li> </ul>



	Behaviourism –imitation,repitation,re- reinforcement-[Skinner-Pavlov-Thorndike]- Cognitivism-Schema- [Bruner-Piaget] – Constructivism ZPD-Scaffolding, Mental processes [Vygodsky –Gardener]-Chomsky- LAD-Universal grammar -Krashens Hypotheses-Multiple intelligence-Neuro- linguistic programming.	-Presentation-  Meaningful verbal expressions.  Group Discussions.	
--	--	---	--

### UNIT III AIMS AND OBJECTIVES OF TEACHING SANSKRIT[14HOURS+10HOURS]

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To understand Taxonomy of educational objectives [Bloom] with special reference to Sanskrit. 2. To understand the aims and objectives of Sanskrit language teaching. 3. To compare the curriculum of NCERT with SCERT.	<ul style="list-style-type: none"> <li>Blooms taxonomy of educational objectives [revised] with special reference to Sanskrit</li> <li>.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.</li> <li>Comparison of the objectives and learning of Sanskrit in NCERT Curriculum with SCERT..</li> </ul>	Discussions- Lecturing.  CAI cum Discussion.  Lecture method and Collaborative learning-  Assignment and Discussion.  -Analyze the peer instruction-  Narrative expression and self experience-	<ul style="list-style-type: none"> <li>Analyze the Group discussion and Participant observation.</li> <li>Participant observation.</li> <li>Role performance.</li> <li>Participant observation.</li> <li>Oral assessment.</li> <li>Discussion Lesson Templates-5-15marks.</li> <li>Demonstration-3</li> <li>Criticism-3</li> <li>Observation of model video Lessons-2-and reporting-10 marks.</li> </ul>

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

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
1. To understand about the methods and strategies of teaching Sanskrit and to understand the theoretical bases of major approaches.	<ul style="list-style-type: none"> <li>• General principles of language teaching. Maxims of teaching.</li> <li>• Approach, Method, Technique-</li> <li>• -SOS Approach, Communicative approach.</li> <li>• 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 .</li> </ul>	Meaning full verbal expressions- Lecture method. Group Discussions. Presentation.	<ul style="list-style-type: none"> <li>• Role performances.</li> <li>• Observation.</li> <li>• Participant observation</li> <li>• Roll performance.</li> <li>• CE-Test-5Marks.</li> </ul>

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

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

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

- -Samsritadyapana-Visvanathasarma.
- -Sanskritasiksha Ramasuklapandya.
- -The teaching of Sanskrit-D.G.Apte.
- -Language in Education,Omkar N Koul.
- -Sanskrit and ssscience,S.S.Janakikuppu.
- -The problems of Sanskritteaching-Huppanikkar.
- -Samkritasahithyavimarsanam-Dr.NVP.Unnithiri.
- -Keraleeya samskritadyapanavidya-Dr. K.R.Harinarayanan.
- -AUDIO AND VIDEO REFERENCES.
- A work book for Sanskrit learners: DPI 2012 General Education.
- 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 analysing the pedagogic and the linguistic content of Sanskrit Text Books.
- To prepare and design lesson templates of Sanskrit prose poetry, drama. Alenkara and vretta based on the curriculum and text books of Sanskrit .[8-12].
- To develop essential skills in LSRW and core skills based on micro Teaching.
- To appreciate the use of audio-visual aids, ICT, internet and Technology

### CONTENTS:

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

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

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

	<ul style="list-style-type: none"> <li>• Analysis of Linguistic content[vocabulary, synonymous, Anonymous, Gender, Singular, Plural words, ideoms, and phrases]</li> <li>• Grammar ,Subanthas Thinganthas-Cases-Tenses-and moodes [प्रकारIs]. Comparative study of Structure of sentences, in Hindi and Malayalam with Sanskrit.</li> </ul>	method.	
--	---	---------	--

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

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

		Demonstration class. Expert Lessons-Video observation and reporting.[any two]	<ul style="list-style-type: none"> <li>• observation of video lesson and reporting</li> </ul>
--	--	--	---

**UNIT III ESSENTIAL REQUIREMENTS FOR TEACHING OF SANSKRIT[16HOURS+6HOURS]**

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

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

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
<p>1. To appreciate the use of audio-visual aids, ICT, internet and Technology.</p>	<ul style="list-style-type: none"> <li>• The importance of Teaching aids in learning process-design and development-</li> <li>• 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.</li> </ul>	<p>Lecturing and Demonstration of teaching aids.</p> <p>Discussion.</p> <p>Group activities.</p> <p>Preparation of learning aids in workshops.</p> <p>Demonstration and observation of Language lab.</p> <p>Preparation and practice of lesson plans based on ICT, internet, and different audio –visual aids.</p>	<ul style="list-style-type: none"> <li>• Participant observation.</li> <li>• Role performance</li> <li>• Participation.</li> <li>• Role performance.</li> <li>• Participation.</li> <li>• Competence to use this language lab</li> <li>• Performance of students. Examination of lesson templates</li> <li>• Test-5 Marks.</li> <li>• Field trip-10 marks.</li> </ul>



## **EDU. 04.5: THEORETICAL BASE OF ARABIC EDUCATION**

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

### **Objectives**

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

### **Contents**

**UNIT 1: GENERAL INTRODUCTION TO TEACHING AND LEARNING:**

**UNIT II: NATURE AND DEVELOPMENT OF ARABIC LANGUAGE**

**UNIT III: AIMS AND OBJECTIVES OF TEACHING ARABIC LANGUAGE**

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

**UNIT 1: General Introduction to Teaching and Learning**

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

**UNIT II: NATURE AND DEVELOPMENT OF ARABIC LANGUAGE**

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

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

### UNIT III: AIMS AND OBJECTIVES OF TEACHING ARABIC LANGUAGE

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

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

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

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

**References:**

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

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

## EDU. 05.5 : PEDAGOGIC CONTENT KNOWLEDGE ANALYSIS-ARABIC.

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

### Objectives

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

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

### Contents

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

**UNIT II: PLANNING & DESIGNING OF LESSON TEMPLATES**

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

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

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

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

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

### UNIT II: Planning and Designing of Lesson Templates

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



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

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

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

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

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

#### References:

- Al Muallim al Najih:, Dr. Abdullah al Amiri, Dar Usama li -nashir wa thouzeea'
- Thatweeru Adai -al Muallim; kifayathu thaaleem wa thahleel al muthawasila : Hashim Uwaidha, Dar al Ilm al Malayeen , Labanan
- Thuruqu thadrees al lugha al Arabiyya lil madaris al muthawassitha wa thanaiyya : Hasan Mulla Uthman ; Dar alam al Kuthub lithbaa wa nnashshr wa thouzeea, Riyadh, KSA
- Thaaleemu al lugha al arabiyya baina nadriyya wa thathbeeq: Dr Hasan Al Shahatha, Dar Misriyya wa llubnaniya
- Mushkilathu thaaleemu llughal Arbiyya: Abbas Mahmood ; Dar alsaqafa, Qatar
- Thareeqathu Thadreesi Wa stratejiiyyathuhu: Dr Muhammed Mahmmod al Haila, Dar Al Kitab Al Jamia, Al ain, UAE
- Al Mawajjah Al Fanni LiMudarrisee al Lughal Al Arabiyya: Abdul Aleem Ibrahim; Dar al maarif, Al qahira
- Thaaleem al lugha al Arabiya lighairi al nathiqeena biha : Makthab al tharbiyya al Arabi liduwal al Khaleej
- Ilmu al lugha; Muqadhima lilil qaria al Arabi: Dr. Mahmood Al Saaran, Dar al- N ahda al Arabiyya
- Thaqnolojiya al Thaaleem; Al wasail al thaaleemiyya wa thaqniyyath al thaaluum: Dr. Muhammed Assam Tharbay , Dar Hammurabi lilmashri wa thouzeea
- Asaleeb Wa Thuruqu al-Thadrees al Hadeesa : Dr. Muhammed Assam Tharbaya; Dar Hammurabi lilmashri wa thouzeea
- Providing teachers effective strategies for using technology techrends: Brown B& Henscheid
- Istheeratheejiyyath wa Maharah al Tharees :Kamal al Jundi; Dar al Jumhooriya lilthibaa
- Wasaail al Ithisal wa 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 Nathaijuhu wa Thathbeeqathuhu: Dr Fikri Hasan Rayan, Aalm al kutub , al qahira
- Madkhal Ila Tharbiya al muthamayyizeena wal Mauhooben, 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 lilbuhuzu 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 Mudarisee al Lugha Al Arabiyya: Abid Thoufeeq al Hashmi; Al Risala publishing House, Bairoot
- Taxonomy of Educational Objectives : Bloom ,B.S.et al (1968)Handbook , D.Mc , New York
- A taxonomy of learning, teaching & assessing: A Revision of Blooms taxonomy of educational objectives : Anderson, LW& Krathwohl, DR(2001), New York, Longman
- Teaching Strategies: A guide to better instructions, HMCo. New York

## EDU- 04.6 : THEORETICAL BASE OF TAMIL EDUCATION

(Theoretical Discourses- 60 & CE – 30 hours)

### Objectives:

The student teacher :

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

### Contents :

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

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

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

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

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

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

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

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

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

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

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

## EDU- 05.6 : Pedagogic Content Knowledge Analysis : Tamil.

(Theoretical discourses -60 & CE – 30 hours)

### Objectives:

The student teacher:

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

### Contents ;

**Unit I: Introduction to Pedagogic Content Knowledge (PCK)**

**Unit II: Planning and Designing of Lesson Templates**

**Unit III: Essential Requirements for Teaching of Tamil**

**Unit IV: Resources in Teaching and Learning of Tamil**

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

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



	<p>and Creative), Problem Solving</p> <ul style="list-style-type: none"> <li>• 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.</li> </ul>	Course Books	
--	--	--------------	--

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

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

		supervised guidance Task-directed discussion and Applied exercises	
--	--	---	--

**Unit 3: Essential requirements for teaching of Tamil ( 20 hours)**

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

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

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

## EDU- 04.7: THEORETICAL BASE OF MATHEMATICS EDUCATION.

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

### Objectives:

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

### Contents:

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

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

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

	<ul style="list-style-type: none"> <li>• Phases of teaching(Pre-active, Interactive and Post- active teaching )</li> <li>• Maxims of Teaching /Learning</li> <li>• Teacher behaviour and Learning</li> <li>• <b>Class Room</b></li> <li>• Concept of Virtual Learning Environment(Class room without wall)</li> </ul>		
--	---	--	--

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

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

	Utilitarian, Disciplinary, Cultural, Aesthetic, Social, Moral, International etc. <ul style="list-style-type: none"> <li>• <b>Correlation of Mathematics with</b> life, other subjects and different branches of the same subject</li> </ul>	Group discussions Seminar	
--	--	------------------------------	--

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

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

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

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

**References :**

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

- Bagyanathan, D. (2007). Teaching of mathematics. Chennai: Tamil Nadu Text Book Society.
- Ediger, M. & Rao, D. B. (2000). Teaching Mathematics Successfully. New Delhi: Discovery Publishing House.
- James, A. (2005). Teaching of Mathematics. New Delhi: Neelkamal Publications, Pvt. Ltd.
- James, A. (2006). Techniques of Teaching Mathematics. New Delhi: Neelkamal Publications Pvt. Ltd.
- Joyce, B., Weil, M. & Calhoun, E. (2009). Models of Teaching ( 8th ed.). New Delhi: PHI Learning Private Limited.
- Kilpatrick, W. H. (1918). The project method. Teachers College Record, 19, 319-335.
- Kulshreshtha, A. K. (2008). Teaching of Mathematics. Meerut: R.Lall Books Depot
- Kumar, S. & Ratnalikar, D.N. (2003). Teaching of Mathematics. New Delhi: Anmol Publications Pvt. Ltd.
- Mangal, S.K. Teaching of Mathematics. Ludhiana: Prakash Brothers Educational Publishers.
- Mustafa, M. (2005). Teaching of Mathematics. New Delhi: Deep and Deep Publications Pvt. Ltd.
- Orton, A. (2007). Learning Mathematics. (3rd ed.). London: Continuum
- Siddiqui, H.S. & Khan, M.S. (2004). Models of Teaching - Theory and Research. New Delhi: Ashish Publishing House.
- Siddiqui, M. H. (2007). Teaching of Mathematics. New Delhi: APH Publishing Corporation.
- Soman, K. Ganitha sashtra bodhanam. Thiruvananthapuram: Kerala Bhasha Institute.
- Wadhwa, S. (2000). Modern Methods of Teaching Mathematics. New Delhi: Sarup & Sons.
- Rao, D.B. & Pushpalatha, D. (1995). Achievement in Mathematics. New Delhi: Discovery Publishing House.



## EDU 05.7: PEDAGOGIC CONTENT KNOWLEDGE ANALYSIS: MATEMATICS

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

### Objectives:

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

### Contents:

**Unit 1: Introduction to Pedagogic Content Knowledge**

**Unit 2: Planning and Designing of Lesson Templates**

**Unit 3: Essential Requirements of Teaching Mathematics**

**Unit 4: Resources in Teaching and Learning Mathematics**

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

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

learning activities and evaluation strategies		Assignment	
---	--	------------	--

**Unit II: Planning and Designing of Lesson Templates (25 hours)**

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

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

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

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

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

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

## References :

- Aggarwal, J.C. (2001). Principles, Methods & Techniques of Teaching (2nd ed.). New Delhi: Vikas Publishing House Pvt. Ltd.
- Dash, B.N. (2005). Psychology of Teaching Learning Process, New Delhi: Dominant Publishers and Distributors.
- Ediger, M. & Rao, D. B. (2000). Teaching Mathematics Successfully. New Delhi: Discovery Publishing House.
- Gardner, H. (1983) Frames of Mind: The Theory of Multiple Intelligences. New York: Basic Books.
- James, A. (2005). Teaching of Mathematics. New Delhi: Neelkamal Publications, Pvt. Ltd.
- James, A. (2006). Techniques of Teaching Mathematics. New Delhi: Neelkamal Publications Pvt. Ltd.
- Joyce, B., Weil, M. & Calhoun, E. (2009). Models of Teaching ( 8th ed.). New Delhi: PHI Learning Private Limited
- Kumar, S. & Ratnalikar, D.N. (2003). Teaching of Mathematics. New Delhi: Anmol Publications Pvt. Ltd..
- Malhotra, V. (2006). Methods of Teaching Mathematics, New Delhi: Crescent Publishing Corporation.
- Mustafa, M. (2005). Teaching of Mathematics. New Delhi: Deep and Deep Publications Pvt. Ltd
- Orton, A. (2007). Learning Mathematics. (3rd ed.). London: Continuum
- Siddiqui, H.S. & Khan, M.S. (2004). Models of Teaching - Theory and Research. New Delhi: Ashish Publishing House.
- Siddiqui, M. H. (2007). Teaching of Mathematics. New Delhi: APH Publishing Corporation.
- Wadhwa, S. (2000). Modern Methods of Teaching Mathematics. New Delhi: Sarup & Sons.
- Rao, D.B. & Pushpalatha, D. (1995). Achievement in Mathematics. New Delhi: Discovery Publishing House.
- Mangal, S.K. Teaching of Mathematics. Ludhiana: Prakash Brothers Educational Publishers.
- NCERT (2006). National Curriculum Framework for School Education 2005. New Delhi.
- NCERT. A Text Book of content – cum – methodology of Teaching Mathematics, New Delhi: NCERT.
- Soman, K. Ganitha sashtra bodhanam. Thiruvananthapuram: Kerala Bhasha Institute.

## EDU- 04.8 : THEORETICAL BASE OF PHYSICAL SCIENCE EDUCATION

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

### Objectives:

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

### Contents:

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

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

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

Development 6. To acquaint with the qualities, duties and responsibilities of science teacher 7. To understand the changing roles of teacher in the present scenario	engineer and reflective practitioner. • Professional growth of science teacher Continuing Professional Development (CPD)	Video streaming	
--	--	-----------------	--

**Unit 2: Nature and Development of Science Education (10+5=15 hours)**

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To understand the nature and scope of science 2. To familiarize with the evolution of scientific achievements. 3. To identify and highlight the contributions of scientists in India and abroad 4. To appreciate the contributions given by the Indian women scientists 5. To familiarize with the evolution of teaching of science 6. To identify the role of science for sustainable development	<ul style="list-style-type: none"> <li>• Nature of science-science as a product , process)</li> <li>• Scope of science-Values (intellectual, social, practical, disciplinary, recreational, moral, aesthetic)</li> <li>• Development of science in ancient, medieval and modern periods.</li> <li>• 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</li> <li>• Evolution of science education</li> <li>• Emerging branches in science- Nanotechnology, Bioinformatics, information Technology, Geoinformatics</li> <li>• Science for sustainable development</li> </ul>	Group discussion  Seminar  Personality profile presentation  Creative blog	<ul style="list-style-type: none"> <li>• Document analysis</li> <li>• Posters</li> <li>• Online assessment</li> <li>• Quiz programme</li> </ul>

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

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

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

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

**Reference**

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



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

## EDU - 05.8 : PEDAGOGIC CONTENT KNOWLEDGE ANALYSIS : PHYSICAL SCIENCE

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

### Objectives:

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

### Contents:

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

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

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

	<ul style="list-style-type: none"> <li>PCK Analysis of Physical science content from secondary school syllabus prescribed by SCERT</li> </ul>	Net surfing	
--	---	-------------	--

**Unit 2: Planning and Designing of Lesson Templates (20+15=35 hours)**

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

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

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

	variation, Using audio-visual aids, discussion, promoting pupil participation, Classroom management.		
	<ul style="list-style-type: none"> <li>• Link Practice</li> </ul>		

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

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

**Reference**

- Julie Gess- Newsome & Norman G. Lederman(1999): Examining Pedagogical Content Knowledge: Netherlands, Kluwer Academic Publishers.
- Mishra R. C. (2008): Lesson Planning: New Delhi, A P H Publishing Corporation.
- Mariamma Mathew (2014): Teaching science for biological and physical sciences: NAS Publishers: Kerala
- Radha Mohan(2007): Innovative Science Teaching: New Delhi, Prentice Hall of India Pvt. Ltd.
- Y K Singh & Archnesh Sharma(2004): Micro Teaching: New Delhi, A P H Publishing Corporation.
- MangalS.K.&UmaMangal(2009):Essentialsof EducationalTechnology:NewDelhi,PHILearningPvtLtd.
- Alan J. McCormack. Trends and Issues in Science curriculum in Science Curriculum
- Resource Handbook: A practical guide to k12 science curriculum. Kraus International Publications
- Black, P (1998). Testing: Friend or Foe? Theory and practice of Assessment and Testing. Falmer Press, London.
- Carey, S. (1986). Cognitive Science and Science Education. American Psychologist. 41 (10), 1123- 1130
- Chalmers, A. (1999). What is the thing called Science.3rd Ed. Open University Press, Bucking ham.
- Driver. R, Leach. J, Millar. R and Scott, P. (1996). Young Peoples' Image of Science. Open University Press, Buckingham.

## EDU – 04.9 : THEORETICAL BASE OF NATURAL SCIENCE EDUCATION

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

### OBJECTIVES:

Enable the student teacher to

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

### CONTENTS

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

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

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

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

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

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

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

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

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

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



#### UNIT IV METHODS AND STRATEGIES FOR TEACHING NATURAL SCIENCE (Theory hours-21)

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

#### SUGGESTED REFERENCES

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

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

### INTERNET REFERENCES

- <http://www.csun.edu/science/biology/index.htm>
- [http://archive.org/stream/modernmethodsand029422mbp/modernmethodsand029422mbp\\_djvu.txt](http://archive.org/stream/modernmethodsand029422mbp/modernmethodsand029422mbp_djvu.txt)
- [http://books.google.com/books/about/Modern\\_Methods\\_and\\_Mater...](http://books.google.com/books/about/Modern_Methods_and_Mater...)
- <http://www.amazon.com/Teaching-Secondary-School-Science-Stra...>
- [http://www.ncert.nic.in/new\\_ncert/ncert/rightside/links/pdf/...](http://www.ncert.nic.in/new_ncert/ncert/rightside/links/pdf/...)
- [http://www.ncert.nic.in/right\\_side/links/pdf/framework/english/nf2005.pdf](http://www.ncert.nic.in/right_side/links/pdf/framework/english/nf2005.pdf)
- <http://www.ssamis.com/web/downloads/KCF%202007.pdf>

## EDU- 05.9: PEDAGOGIC CONTENT KNOWLEDGE ANALYSIS - NATURAL SCIENCE

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

### OBJECTIVES :

Enable the student teachers to:

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

### CONTENTS

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

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

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

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

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

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

3. To make Pedagogic content knowledge analysis of secondary school Biology syllabus.		Text Book analysis and peer instruction	<ul style="list-style-type: none"> <li>• Student's portfolio</li> </ul>
---	--	---	---

### UNIT II - INSTRUCTIONAL PLANNING FOR TEACHING NATURAL SCIENCE (Theory hours-20 )

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

### UNIT III - TEACHING SKILLS AND ITS DEVELOPMENT:

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

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

<p>3. To familiarize the different phases of micro teaching.</p> <p>4. To develop skill in designing micro lessons.</p> <p>5. To develop skill in practicing micro lesson.</p>	<ul style="list-style-type: none"> <li>○ <b>Micro-teaching:</b> Objectives, Micro-teaching cycle - its relevance in teacher training programme.</li> <li>○ <b>Importance of Link practice.</b></li> <li>● <b>3.4 Design and development of micro lessons-</b> practice and documentation with appraisal format to elicit feedback.</li> </ul>	<p>Multimedia and interdisciplinary approach.</p> <p>Team teaching.</p> <p>Peer tutoring</p> <p>Group discussion.</p> <p>Narrative expressions</p>	<ul style="list-style-type: none"> <li>● Symposium.</li> <li>● Questioning</li> <li>● Tests</li> <li>● Peer evaluation</li> <li>● Assessing micro lessons</li> <li>● Assessing micro teaching.</li> </ul>
--	---	--	---

**UNIT IV – RESOURCES IN TEACHING AND LEARNING OF NATURAL SCIENCE (Theory hours-10)**

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

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

#### SUGGESTED REFERENCES

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

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



## EDU – 04.10 – THEORETICAL BASE OF SOCIAL SCIENCE EDUCATION

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

### Objectives:

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

### Contents:

**Unit: 1 Introduction to Teaching and Learning**

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

**Unit: 3 Aims and objectives of Teaching Social Science**

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

### Unit : 1 Introduction to Teaching and Learning

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

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

### References

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

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

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

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

### References

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

### UNIT : 3 Aims and objectives of Teaching Social Science

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

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

### References

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

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

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

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

#### References

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

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

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

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

### Objectives

- To understand the key aspects involved in systematic PCK analysis
- To develop skill in analyzing the content of secondary level Social Science text book
- To justify the importance and phases of instructional planning in Social Science
- To equip prospective teacher 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

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

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

### References

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



### Unit: 2 Instructional Planning and Designing Lesson Transcripts

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

#### References

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

### Unit: 3 Essential Requirements of Teaching Social Science Education

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

#### References

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

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

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

#### References

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

## EDU – 04.11 : Theoretical Base of Geography Education

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

### Objectives :

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

### Contents :

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

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

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

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

## Reference

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

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

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

### Reference

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

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

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

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

## Reference

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

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

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



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

### Reference

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

## EDU – 05.11 : Pedagogical Content Knowledge Analysis- Geography

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

### Objectives :

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

### CONTENTS :

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

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

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

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

### Reference

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

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

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

### Reference

- [http://answers . yahoo.com/question](http://answers.yahoo.com/question)
- <http://www.ierng.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
- Green. G.H (1978) Planning the lesson, London; Longman
- <http://en.wikipedia.org/wiki/wiki>
- Sigh. R.L, Singh, Rana, P.B (2002) Elements of Practical Geography: New Delhi, Kalyan Publications
- NCERT: Standard 11<sup>th</sup> 12<sup>th</sup> Geography textbook

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

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

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

#### Reference

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

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

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

#### Reference

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

## EDU- 04.12 – THEORETICAL BASE OF COMMERCE EDUCATION

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

### Objectives

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

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

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To familiarize with the conceptualized version of components required to enter in teaching profession	<ul style="list-style-type: none"> <li>• 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.</li> </ul>	Meaningful verbal presentation Brain storming Case analysis of 2/3 famous teachers Buzz session to	<ul style="list-style-type: none"> <li>• Idea generating exercises</li> <li>• Case analysis presentation</li> </ul>

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

**Unit: 2 Nature, Scope and Development of Commerce Education. (12 Hrs + 7 Hrs)**

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



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

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

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

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
1. To analyze the unique features of different instructional methods suited for teaching commerce  2. To proficient in select most appropriate teaching methods in varied context and content.  3. To opt and practice apposite techniques to extract process and product in commerce teaching	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Techniques of Teaching – Drill, Brain storming, Role play, Review, Dramatization, Buzz session, simulation, Quiz session.</li> <li>• Instructional strategies – Co operative learning strategies, Collaborative learning strategies, Scaffolding strategies.</li> </ul>	Seminar  Debate  Buzz session  Quiz session  Problem solving method  Project method	<ul style="list-style-type: none"> <li>• Report presentation &amp; verification</li> </ul>

## References

- Aggarwal, J.C. (1996) A Practical Approach. New Delhi : Vikas Publishing House Pvt. Ltd.
- Anderson, W. L and Krathwohl, D.R, A Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives. Allyn & Bacon: Boston.
- Bloom, B. S. (1956). Taxonomy of Educational Objectives: Cognitive Domain. New York: David McKay Co.
- Gronlund, N.E (1970) Stating Behavioural objectives for class room instruction. London: MacMillan
- Krathwohl, et.al, Taxonomy of Educational Objectives, Hand Book II: Affective Domain. McKay: New York.
- Kumar, Mahesh (2004). Modern teaching of commerce. New Delhi: Anmol Publications Ltd
- N.C.E.R.T. (1989). Instructional objectives of school subjects. New Delhi: N.C.E.R.T
- Raj, Rani Bansal (1999). Models of teaching and concepts of learning. New Delhi: Anmol Publications.
- Raj, Rani Bansal (1999). New trends in teaching of Commerce: Models of teaching and concepts of learning. New Delhi: Anmol Publications.
- Rao, Digumarti Bhaskara (2006) Methods of teaching commerce (2006). New Delhi: Discovery publishing house
- Rao, Seema (2005) Teaching of Commerce. New Delhi: Anmol Publications Ltd
- Singh, V.K (2006). Teaching of Commerce. New Delhi: A.P.H. Publishing corporations.

## EDU – 05.12: PEDAGOGIC CONTENT KNOWLEDGE ANALYSIS – COMMERCE

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

### Objectives

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

### Contents :

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

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

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

3. To develop skill in analyzing the content of higher secondary commerce text book	process, rules, equations. <ul style="list-style-type: none"> <li>Content analysis of higher secondary business studies and accountancy text book.</li> </ul>	Self directed learning	
---	--	------------------------	--

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

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

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

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

2. To generate skill orientation among prospective teacher educands through practical experiences	and assessment mechanisms. <ul style="list-style-type: none"> <li>• Skills in using ICT</li> <li>• Link practice.</li> </ul>	General discussion Demonstration method Analysis of video records	
---	--	---	--

**Unit: 4 Instructional Resources in Teaching and Learning of Commerce (13 Hrs + 6 Hrs)**

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

**References**

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

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

## EDU - 04.13 :THEORETICAL BASE OF HOME SCIENCE EDUCATION

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

### Objectives:

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

### Contents:

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

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

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

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

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

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



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

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

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

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

## Reference

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

## Internet References

- [http://archive.org/stream/modernmethodsand029422mbp/modernmethodsand029422mbp\\_djvu.txt](http://archive.org/stream/modernmethodsand029422mbp/modernmethodsand029422mbp_djvu.txt)
- [http://books.google.com/books/about/Modern\\_Methods\\_and\\_Mater...](http://books.google.com/books/about/Modern_Methods_and_Mater...)
- <http://www.amazon.com/Teaching-Secondary-School-Science-Stra...>
- [http://www.ncert.nic.in/new\\_ncert/ncert/rightside/links/pdf/...](http://www.ncert.nic.in/new_ncert/ncert/rightside/links/pdf/...)
- <http://www.ncert.nic.in/rightside/links/pdf/framework/english/nf2005.pdf>
- <http://www.ssamis.com/web/downloads/KCF%202007.pdf>

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

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

### Objectives:

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

### Contents:

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

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

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

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

**Unit 2: Instructional Planning for Teaching Home science (14+8=22 hours)**

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

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

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
1. To identify competencies required for a teacher to be professional. 2. To develop understanding of various teaching skills 3. To understand microteaching and its relevance in the development of teaching skills 4. To design, practice and document micro lessons in Home Science	<ul style="list-style-type: none"> <li>Teacher Competencies-Subject competencies, Pedagogical competencies, Technological competencies.</li> <li>Teaching skills- definition, core teaching skills, components of teaching skills</li> <li>Microteaching - Definitions and meaning, objectives, principles, steps, microteaching cycle</li> <li>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.</li> <li>Link Practice</li> </ul>	Meaningful verbal expression  Group discussion  Document analysis and  Peer evaluation  Document analysis  Video observation  Reflective practices  -	<ul style="list-style-type: none"> <li>Analysis in group discussion</li> <li>Lesson segment preparation</li> <li>Observation schedule designing</li> <li>Think, Pair and Share sessions</li> <li>Recording and evaluation of Micro Teaching Lessons (10 skills / one skill per student)</li> <li>Criticism lessons (5)</li> </ul>

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

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

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

### Reference

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

### Internet References

- <http://instedd.org/technologies/resource-map/>
- [http://archive.org/stream/modernmethodsand029422mbp/modernmethodsand029422mbp\\_djvu.txt](http://archive.org/stream/modernmethodsand029422mbp/modernmethodsand029422mbp_djvu.txt)
- [http://books.google.com/books/about/Modern\\_Methods\\_and\\_Mater](http://books.google.com/books/about/Modern_Methods_and_Mater)

# EDU – 101.2 : Yoga, Health and Physical Education

( 2 credits – 60 hours & 50 marks)

## Objectives

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

## Contents

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

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

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



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

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

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

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

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

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

**Guidelines for Practical Work**

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

## **EDU – 101.3 : ART AND AESTHETICS EDUCATION .**

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

### **Contents :**

#### **Introduction to Art and Culture.**

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

#### **Fine arts.**

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

#### **Art and culture.**

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

#### **Practicals:**

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

## **SEMESTER – II**

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

### **Perspectives in Education/Core Subjects:**

*EDU-06 : Education in Indian Society.*

*EDU-07 : Perspectives of Learning and Teaching.*

*EDU-08 : Assessment in Education.*

### **Curriculum and Pedagogic courses/Optional subjects:**

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

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

## EDU - 06: EDUCATION IN INDIAN SOCIETY

Hours to transact: 90 hrs (Theoretical Discourses – 60 & CE- 30)

### Objectives

- To Develop an understanding of the evolution of education in Indian society
- To identify the role education in national development
- To recognize initiatives in modern Indian education
- To analyse the challenges in Indian education and the role of teacher in the changing scenario
- To familiarise with the emerging trends of education

### Contents:

UNIT 1: MILESTONES IN INDIAN EDUCATION (35hrs)

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

UNIT III :INITIATIVES IN INDIAN EDUCATION (20hrs)

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

### UNIT 1: MILESTONES IN INDIAN EDUCATION (35 hrs)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To develop an understanding of the evolution of education in Indian society 2. To acquaint with existing educational policies and commissions in India 3. To understand changes of education system in Kerala	<ul style="list-style-type: none"> <li>• Dravidian education- social structure- literature-Institutions for scholastic, recreational and legal functions- role of 'salai 'in higher education</li> <li>• Vedic education-characteristics and curriculum- significance of Upanishad in maintaining world peace and sustainable development - vidya and vaidya, two pillars of a civilized society.</li> <li>• Buddhist education- aim of education and curriculum-</li> <li>• Significance of non violence and attitude</li> </ul>	Historical method  Integrating ICT  Lecture-discussion  e- learning  Document analysis  Historical method	<ul style="list-style-type: none"> <li>• Role Performance Analysis in group Discussion</li> <li>• Involvement in Debates</li> <li>• Seminar Presentations</li> <li>• Assignments</li> <li>• <b>Internal Test</b></li> </ul>

	<p>against materialistic life style.</p> <ul style="list-style-type: none"> <li>• A brief account on history of Indian education during British period</li> <li>• Education in post independent India: Radhakrishnan Commission (1948) Secondary Education Commission (1952-54) Kothari Commission report (1964-66) New Education Policy 1986</li> <li>• Evolution of education in Kerala (Ancient to modern period)</li> </ul>	and document analysis	
--	---	-----------------------	--

### Reference

- Naik, J.P. (1998). *The Education Commission and After*. New Delhi: Publishing Corporation.
- Sripathi, V. and Thiruvengadam, A.K. (2004), "India: Constitutional Amendment Making The Right to Education a Fundamental Right", *International Journal of Constitutional Law*, 2 (1): 148–158, Oxford University Press
- Report of Secondary Education Commission. Kothari D.S. (1965). New Delhi: Ministry of Education.
- Govt. of India (1986). National Policy on Education, Min. of HRD, New Delhi.
- Govt. of India (1992). Programme of Action (NPE). Min of HRD.
- National Curricular Framework-2005 , 2009
- Right to Education Act -2009
- Knowledge Commission reports 2006, 2007, 2009
- UNESCO reports on Teacher education
- *Learning without Burden*, Report of the National Advisory Committee. Education Act. Ministry of HRD, Department of Education, October, 2004.
- <http://www.gktoday.in/rashtriya-ucchatar-shiksha-abhiyan>
- UNESCO reports on Teacher education
- *Learning without Burden*, Report of the National Advisory Committee. Education Act. Ministry of HRD, Department of Education, October, 2004.
- <http://www.gktoday.in/rashtriya-ucchatar-shiksha-abhiyan>

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

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
1. To identify the relationship between education and national development  2. To understand the role of IPR in national development	<ul style="list-style-type: none"> <li>• Social Indices of National Development</li> <li>• Education as an investment- Share of GDP to Education</li> <li>• ‘Educated unemployment’- Causes and Remedies</li> <li>• Education an instrument for intellectual property and inventions and discoveries for the welfare of the society- (IPR)- Industrial property rights- copy rights and related rights</li> </ul>	Meaningful verbal expression  Document analysis  Panel Discussion  Debates  Seminar	<ul style="list-style-type: none"> <li>• Role Performance Analysis in group Discussion</li> <li>• Extent of awareness on contemporary educational events</li> </ul>

**Reference**

- Amirish Kumar Ahuja. (2007).Economics of education. Authors Press
- Jagannath Mohanty (1998). Modern Trends in Indian Education. New Delhi: Deep and Deep publications
- Humayun Kabir (1951). Education in New India. London: George Allen and Unwin Ltd.
- Subash Chandra Roy.(2009) Lecture on Intellectual property law. Chandigarh National university, Patna
- Sharma. R.A. (2007). Economics of education. Surya Publication
- <http://knowledgecommission.gov.in/>

**UNIT 3 : INITIATIVES IN INDIAN EDUCATION( 20 hrs)**

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
1. To familiarize withthe functions of state and central Apex bodies of educationto familiarize constitutional goals pertaining toeducation	<ul style="list-style-type: none"> <li>• Programmes and Schemes - DPEP,SSA,RMSA, RUSA</li> <li>• Apex bodies- CABE,NCERT,SCERT, DIET, UGC, NCTE, NAAC, NUEPA, NKC</li> <li>• Constitutional Goals - Articles of Indian Constitution Pertaining to Education –</li> </ul>	Debates  Lecture discussion  Documentation and discussion	<ul style="list-style-type: none"> <li>• Performance in debates</li> <li>• Seminar presentations</li> <li>• An extension activity related to the field of reference may be conducted</li> </ul>

	<p>Preamble.</p> <ul style="list-style-type: none"> <li>• Article 21 A, Article 14, Article 15, Article 30, Article 45, Article 46, Article 41, Article 51 A, Article 350A, Article 351</li> <li>• Right to Education Act 2009</li> </ul>		
--	---	--	--

### Reference

- Entwistle, N.(1990). Hand book of educational ideas and practices. London: Roputledge
- Mukopadhyaya et.al.(2008). Globalization and challenges for education. NIEPA. Shipra Publication
- Kohli, V.K. (1987). Indian Education and Its Problems. Haryana: Vivek Publishers.
- NCERT (1986). School Education in India – Present Status and Future Needs, New Delhi.
- Knowledge Commission reports 2006, 2007, 2009

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

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
<ol style="list-style-type: none"> <li>1. To analyze the challenges of Indian Education</li> <li>2. To synthesis the significance of human rights education and peace education</li> <li>3. To keep awareness on futurology of education</li> </ol>	<ul style="list-style-type: none"> <li>• Current Problems of Indian education – Primary- secondary- higher education</li> <li>• Population Education – Need, Trends in Demography, Population explosion and adverse effects</li> <li>• Human Rights education- Meaning and significance</li> <li>• Peaceful coexistence and need for peace education</li> <li>• Inclusive class room –challenges with special reference to child in need and care of protection and child in conflict law.</li> <li>• Futurology of education</li> </ul>	<p>Brain storming</p> <p>Debates</p> <p>Lecture- discussion</p> <p>ICT</p>	<ul style="list-style-type: none"> <li>• Analysis in group Discussion</li> <li>• Extent of awareness on contemporary educational events</li> </ul>



**Reference**

- Agarwal. J.C. (2006). Education for values, Environment and Human Rights. Shipra publications . New Delhi
- Dyakara Reddy. D. & Rau.(2007). Value education. Discovery publishing House. New delhi
- Dhananjaya Joshi.(2006). Value education in global perspectives, Lotus Press
- Yogendra Singh.(2007). Modernisation of Indian tradition. Rawat publication. New Delhi

## EDU - 07 : Perspectives of Learning and Teaching

(Theoretical Discourses – 60 & CE – 30 hours)

**Objectives: To enable the student teacher to:**

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

**Contents :**

- **UNIT I NATURE OF LEARNING**
- **UNIT II COGNITIVE PROCESSES IN LEARNING**
- **UNIT III THOERIES OF LEARNING**
- **UNIT IV INDIVIDUAL DIFFERENCES IN LEARNING**
- 

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

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
<ol style="list-style-type: none"> <li>1. To understand the concept, nature and factors influencing learning.</li> <li>2. To develop an understanding of the process of learning</li> <li>3. To familiarise the concept of memory and forgetting</li> <li>4. To conceptualise the role of motivation in learning</li> </ol>	<ul style="list-style-type: none"> <li>• Meaning, Definition &amp; Characteristics of learning, Factors affecting learning - learner, Method and Task variables, Learning curve, Plateau in learning, Study habits- Concept and methods, Transfer of Learning.</li> <li>• Motivation- Concept, Types, strategies &amp; educational Implications. Theory of</li> </ul>	<p>Lecturing</p> <p>Group discussion on factors affecting learning</p> <p>Brainstorming on method and task</p>	<ul style="list-style-type: none"> <li>• Test paper</li> <li>• Assignments</li> <li>• Practicum</li> <li>• Presentation in seminars</li> <li>• Performance based assessment</li> </ul>

5. To familiarise the concept of achievement motivation	motivation- Abraham Maslow, Achievement motivation	variables of learning  Field study on intrinsic and extrinsic motivation  Construction of learning curve	
---	--	--	--

### Reference

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

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

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To familiarise the cognitive processes 2. To conceptualise cognitive capacities 3. To understand the relevance of cognitive skills in learning 4. To familiarise the basic concepts of cognitive neuroscience	<ul style="list-style-type: none"> <li>• Sensation and Perception- factors, laws, Concept formation, Illusion</li> <li>• cognitive functions -Thinking, Reasoning- Problem solving and</li> <li>• Metacognition</li> <li>• Memory- Concept; Types &amp; Strategies to develop memory,</li> <li>• Forgetting- causes and problems</li> <li>• Cognitive neuroscience- basic concepts and relevance in learning</li> </ul>	Lectures  Preparation of a Concept map  Group discussion on strategies for improving Memory, Reasoning and Problem solving  Memory test	<ul style="list-style-type: none"> <li>• Test paper</li> <li>• Performance based assessment</li> <li>• Practical work</li> </ul>

		Seminars  Discussion on the relevance of cognitive neuroscience	
--	--	---	--

### Reference

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

### UNIT III THEORIES OF LEARNING 25 hours (15T+10P)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To develop an understanding of the process of learning through various theoretical perspectives 2. To familiarise behaviouristic, constructivist and information processing approaches in learning 3. To compare the different approaches in learning 4. To develop learning strategies based on different perspectives	<ul style="list-style-type: none"> <li>• Behaviourist approach- Thorndike, Pavlov and Skinner.</li> <li>• Cognitive approach- Gestalt, Kurt Lewin,</li> <li>• Constructivist approach- Individual and Social- Piaget, Bruner &amp;, Vygotsky.</li> <li>• Social learning theory- Albert Bandura</li> <li>• Gagne’s hierarchy of learning.</li> <li>• Expository learning- Ausubel</li> <li>• Information processing approach to learning- Atkinson and Shiffrin</li> </ul>	Lectures  Critical evaluation of different approaches - Use peer tutoring technique-  List suitable learning activities based on constructivist approach  Cooperative and	<ul style="list-style-type: none"> <li>• Performance in activities</li> <li>• Test paper</li> <li>• Group discussion</li> <li>• Assignments</li> </ul>

		Collaborative Learning activities  Debate on Behaviourism vs constructivism  Psychology lab experiments (any two)	
--	--	---	--

**Reference**

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

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

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
1. To develop an understanding of the concept and areas of Individual difference. 2. To equip the teacher for understanding the learner in the context of their socio cultural and educational background 3. To familiarize the specific factors leading to individual difference. 4. To develop skills to educate students with special needs.	<ul style="list-style-type: none"> <li>• Concept of Individual Differences- Areas of individual Differences - Interest, Attitude and Aptitude</li> <li>• Persons with disability- Types of disability – congenital, acquired, physical, mental and sub-categories: developmental delays, degenerating conditions, sensory, neural, orthopaedic, multiple disabilities.</li> <li>• Models of Education for children with special needs: Special Schools,</li> </ul>	Lectures  Field visits  Institutional survey  Identification of exceptional categories  Design of learning	<ul style="list-style-type: none"> <li>• Test paper</li> <li>• Assignments</li> <li>• Practical activities</li> <li>• Field visit reports</li> <li>• Performance assessment</li> <li>• Observation reports</li> <li>• Intervention activities</li> <li>• Practicum</li> <li>•</li> </ul>

<p>5. To familiarise inclusive education</p> <p>6. To gain experiential learning in dealing special categories of students</p>	<p>Integrated Education, Inclusive Education.</p> <ul style="list-style-type: none"> <li>• Understanding the educational needs of Exceptional learners - Gifted and Slow Learners, Underachiever, Mentally Challenged, ADHD, Learning Disability- Dyslexia, Dysgraphia, Dyscalculia and Dyspraxia, Autism, Deafness, Blindness, Deaf-blindness.</li> <li>• Understanding accommodations, accessibility, Assistive technology in the educational environment.</li> <li>• Inclusive education- National Policy and Acts RCI(1992),PWD (1995), NTA (1999), RTE (2012)</li> </ul>	<p>strategies for exceptional categories</p> <p>Seminars/ Discussions</p> <p>First hand experience with exceptional learners and learning disabled children</p> <p>Direct experience in special schools</p> <p>Screening of movies that have first hand educational experiences.</p>	
--	---	--	--

## Reference

- Ker. C (1998) Exceptional Children, New Delhi, Sterling Publishers.
- Rao KS, Rao DB (2005) Gifted and Talented Education, Sonali, New Delhi
- Sharma P.L (1988), A Teachers Hand Book on IED Helping Children with Special Needs NCERT, New Delhi.
- **Balsara, Maitreya (2011) Inclusive Education for Special Children: New Delhi: Kanishka Publishers and distributors**
- Allport, G.W, (1960). Personality: A psychological Interpretation .NewYork: Henry Holt and Company .
- Anastasia, Anne (1982). Psychological Testing NewYork: Mc Millan Publishing Company.
- Baron, Robert A, ( 2003). Social psychology (10th ed). New Delhi :Prentice Hall of India

- Baron, Robert A, (2003). Psychological (3rd ed). New Delhi, 110092 :Prentice Hall of India.
- Benjamin, W.B., (1985). Hand book of Human Intelligence:Theories, Measurement and Application John, London : Wiley of Sons Inc.
- Beveridge, WIB, (1980). Seeds of Creativity London : Heinemann Educational Book Ltd.
- Carroll, H.A (1984) Mental Hygeine New York, Prentica Hall Publishing Co.
- Crow, L.A and Crow A Educational Psychology (1973) New Delhi : Eurasia Publishing House.
- Duric, L (1990)Educational Psychology New Delhi : Sterling Publishers.
- Entwistle,N.J.(1990). Handbook of educational ideas and practices.London:Routledge
- Ewen, R.B (1980)An Introduction to theories of Personality New York : Academic Press.
- Fisher, Ronald j. (1982). Social Psychology, An Applied Approach. New York : St. Martins Press.
- Hartney, Elizabeth (2008): Stress Management for teachers; U.K: Continuum
- Jangira, N.K., etal (1991). Functional Assessment Guide. New Delhi : NCERT.
- Kinchelore, J.L., & Horn, R.A (Eds.) (2007) The Praeger Handbook of Education andPsychology; India: Praeger (vol. 1,2,3,&4)
- Kochar, S.K (1993), Educational and Vocational Guidance in Secondary Schools. New York : Sterling Publishers.
- Kuppuswami, B. (1967). An Introduction to Social Psychology. Bombay :AsiaPublishing House.
- Martin, garry and Pear, Joseph (2003) .Behaviourmodification : what it is and How to do it (7th Ed.). New Delhi: Prentice Hall of India . 110 092.
- Moghaddam, F.M. (2007) Great Ideas in Psychology: A Cultural and Historical Introduction; India: Oxford; One World.
- Musser, P.H, Conger, S and Kagar, P (1964) Child Development and Personality, New York : Harper Row
- Personality Classic Theories & Modern Research.New Delhi, Pearson Education
- Reilly, P.R & Levis, E (1983) Educational Psychology New York :Macmillian Publishing Co Ltd.
- Sindhu, I.S., (2013); Educational Psychology: India
- Umadevi, M.R.,(2009) Educational Psychology: Theories and Strategies for Learning and Instruction, Bangalore, Sathkruthi Publications

#### Websites

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

## **EDU - 08 : ASSESSMENT IN EDUCATION.**

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

### **Objectives:**

The student teachers will be able to:

- Understand the concept and nature of Assessment and Evaluation in education
- Understand the role of Assessment and Evaluation in teaching-learning process
- Examine the contextual roles of different forms of assessment in schools
- Acquaint with the new evaluation practices in education
- Realize different dimensions of learning
- Familiarize with various assessment procedures, tools and techniques
- Develop an investigatory attitude through a proper understanding of the paradigms of research
- Develop the capability for research embedded instruction
- Integrate action research practices in the teaching-learning context
- Develop ability in analyzing and interpreting assessment data
- Understand the methods of finding important statistical measures and representing data using graphs

### **Contents**

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

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

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

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



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

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
<ol style="list-style-type: none"> <li>1. To Distinguish clearly between assessment and evaluation</li> <li>2. To state the purposes of evaluation and to enlist various types of evaluation</li> <li>3. To acquaint the students with taxonomy of instructional objectives</li> <li>4. To identify the factors to be considered for successful assessment</li> <li>5. To familiar with the Current practices in evaluation</li> </ol>	<ul style="list-style-type: none"> <li>• Assessment and Evaluation in Education - Purposes of Evaluation</li> <li>• Types of evaluation-Formative and Summative, Outcome Evaluation, Process Evaluation, Self Evaluation, Peer Evaluation, Product Evaluation, External Evaluation, Internal Evaluation and Objective based Evaluation.</li> <li>• Brief introduction to Instructional objectives as the basis of scientific evaluation-Bloom’s taxonomy of educational objectives; Domains of learning – cognitive, affective and Psycho motor.</li> <li>• Factors to be considered for successful assessment</li> <li>• Current practices in assessment and evaluation –CCE- concept, need and relevance, Grading system- concept, types-absolute grading, direct grading and relative grading, merits and demerits. Grade Point Average, Cumulative Grade Point Average, Weighted average and weighted score/point. Classification of learners according to their level of performance in Grading system (By giving letter grades such as: A+, A, B+,B etc.)</li> </ul>	<p>ICT enabled group discussion Lecture-discussion Group Discussion</p> <p>Meaningful verbal Expression</p> <p>Collaborative interaction</p> <p>Lecture and Discussion</p>	<ul style="list-style-type: none"> <li>• Document Analysis</li> <li>• Field visit reports</li> <li>• Class test</li> <li>• Role Performance</li> <li>• Analysis in group Discussion</li> <li>• Seminar Presentations</li> </ul>

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

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
<ol style="list-style-type: none"> <li>1. To understand different techniques of assessment like interview, self-reporting and testing and their applications in the field of education.</li> <li>2. To familiarize with various tools of assessment and develops skill in applying in the field of research</li> <li>3. To understand the qualities of a good evaluation tool</li> <li>4. To understand Norm Referenced and Criterion referenced Evaluation</li> <li>5. To develop the ability to construct the tools such as Diagnostic Test and Achievement Test</li> <li>6. To familiarize with the relevance of online Examination, portfolio and rubric assessment</li> </ol>	<ul style="list-style-type: none"> <li>• <b>General Techniques of Assessment-</b> Observation, projects, assignments, worksheets, practical work, seminars and reports, Interview, Self reporting.</li> <li>• <b>Tools of Assessment-</b> tests, checklist, rating scale, cumulative record, questionnaire, inventory, schedule, anecdotal record-concept, merits, demerits - relevance in the field of research</li> <li>• <b>Characteristics of a good evaluation tool-</b> validity , reliability, objectivity and practicability</li> <li>• <b>Norm-referenced tests and Criterion-referenced tests.</b></li> <li>• <b>Diagnostic Test and Achievement Test-</b> Concept, Purpose and Distinction between the two tests, Steps involved in the construction of an Achievement test and Diagnostic test, Types of items-Objective type, Short answer type and Essay type, Item analysis-concept, Teacher made and Standardized Achievement tests.</li> <li>• Online examination/Computer based Examination, Portfolio assessment and Evaluation based on Rubrics</li> </ul>	<p>Lecture Cooperative Learning</p> <p>Discussion</p> <p>Collaborative Interaction in Debates</p> <p>Working on online Resources Group discussion and Presentation</p> <p>Discussion &amp; Presentation</p>	<ul style="list-style-type: none"> <li>• Initiation and performance in dramatization</li> <li>• Role Performance Analysis in group Discussion</li> <li>• Involvement in Debates</li> <li>• Seminar Presentations</li> <li>• Class test</li> <li>• <b>(Practicum-Development of any one Evaluation tool)</b></li> </ul>

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

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
<ol style="list-style-type: none"> <li>1. To understand the need, importance and meaning of Statistics</li> <li>2. To familiarize the relevance of statistics in analyzing data</li> <li>3. To understand the meaning and nature of data</li> <li>4. To tabulate the data in a meaningful and systematic way</li> <li>5. To appreciate the importance of the organization of data</li> <li>6. To understand the advantages of graphical representation of data</li> <li>7. To represent data using appropriate graphic representation and interpret accordingly</li> </ol>	<ul style="list-style-type: none"> <li>• Role and importance of statistics in analyzing assessment data, Population and Sample</li> <li>• Data, Types of Data- Primary &amp; Secondary, Quantitative &amp; Qualitative</li> <li>• Classification of Data, Frequency Table (Grouped &amp; Ungrouped)</li> <li>• Graphical Representation of Data- need and importance, Representing data using Bar Diagram and Pie Diagram, Histogram, Frequency Polygon, Frequency Curve and Ogives, Interpretation of graphical representations.</li> </ul>	<p>Narrative expression in small group</p> <p>Group Discussion</p> <p>Meaningful verbal Expression</p> <p>Active learning process,</p> <p>Advance organizer Approach</p> <p>Techno- lab activities &amp; Individual assignments</p>	<ul style="list-style-type: none"> <li>• Evaluation based on documentation.</li> <li>• Role performance analysis in group discussion</li> <li>• Participant observation</li> <li>• (Practicum - on Graphical Representation of any <b>Data</b>)</li> </ul>
<ol style="list-style-type: none"> <li>8. To find out different measures of central tendency</li> <li>9. To select the most appropriate measures of central tendency for the treatment of data</li> <li>10. To find out different measures of Dispersion</li> <li>11. To select the most appropriate measures of dispersion for the treatment of data</li> <li>12. To familiarize with the use of correlation for data analysis</li> <li>13. To understand the method of calculating correlation coefficient using rank difference method</li> </ol>	<ul style="list-style-type: none"> <li>• Descriptive Statistical Measures : Measures of Central Tendency- Mean, Median, Mode- concept and methods of finding each measure and when to use each measure. Measures of Variability/Dispersion- Range, Mean Deviation, Quartile Deviation, Standard Deviation- concepts and methods of finding each measure and When to use each measure.</li> <li>• Correlation- meaning and importance, Concept of Coefficient of correlation, Types of Correlation- Positive, Negative, Zero and Perfect Correlation, Rank Difference Method of calculating Coefficient of correlation, interpretation of correlation.</li> </ul>	<p>Active learning Process</p> <p>Computation</p> <p>Mathematical problem solving</p> <p>Class wise discussion through Lecture.</p> <p>Presentation</p> <p>Narrative expression in small group</p> <p>Problem solving</p>	<ul style="list-style-type: none"> <li>• Evaluating the product and process</li> </ul>

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

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
<ol style="list-style-type: none"> <li>1. To understand the need and importance of research in general and educational research in particular</li> <li>2. To realize the relevance of hypothesis formation and the skill to form different forms of hypothesis</li> <li>3. To understand the nature of different types of research and their applications</li> <li>4. To familiarize with various types of research and their applications</li> <li>5. To get acquainted with planning and developing of action research</li> <li>6. To understand how to carry out action researches and prepare the reports</li> <li>7. To familiarize with planning and developing projects</li> <li>8. To understand how to carry out Projects and prepare the reports</li> </ol>	<ul style="list-style-type: none"> <li>• <b>Research</b>- meaning, characteristics, functions of research ,characteristics of a good researcher, Teacher as a researcher, need and importance of Educational research.</li> <li>• <b>Hypothesis</b>- meaning, relevance/role/functions, forms of hypothesis-null form, prediction form, question form and statement form</li> <li>• <b>Types of research</b> (based on purpose only)- basic/fundamental research, applied research and action research.</li> <li>• <b>Action research</b>- Need, scope, characteristics, Steps involved:- Problem identification, Defining and Analyzing the problem, Formulating and Testing action hypotheses and Preparing the report - and Advantages and Limitations of action research, Integrating action research practices -need and scope, Preparation of Action research reports.</li> <li>• <b>Research Projects</b> – Definition of a project, Steps involved:- Initiation (Providing/creating situations), Selection/Choosing, Planning/Designing, Execution, Evaluation and Recording/Reporting. Preparation of Project reports</li> </ul>	<p>Lecture-discussion ICT enabled class wise discussion</p> <p>Collaborative interaction</p> <p>Group Discussion</p> <p>Critical evaluation of need for educational research Lectures Group discussion</p> <p>Meaningful verbal Discourse</p> <p>Lectures Group discussion</p> <p>Collaborative Interaction</p>	<ul style="list-style-type: none"> <li>• Role Performance Analysis in group Discussion</li> <li>• Class test</li> <li>• Seminar Presentations</li> <li>• Analysis in group Discussion</li> <li>• Class test</li> </ul>

**Reference**

- Adamu S ,O and Johnson. T.C.(1975); *Statistics for Beginners*, Onibonoje Press.

- Adedayo. O .A. and Nwosu. N. ( 1996); *Elements of Social Science statistics*. Ijebu- Ode. Shebiolimo Press
- Adeniran. S.A.,Ojerinde and Olosunde. G.R.(2001); *Test, Measurement and Evaluation*. Oduniat Press.
- Araoye. M.O.(2003): *Research Methodology with Statistics for health and social sciences*.
- Awoyemi. M. O and Duarte. S.N. (2007): *Research Methodology in education*. Cape Coast: K.N.A.I. Ltd.
- Best, John.W and James.V.Kahn(2005), *Research in Education*. PHI Learning Private Limited. New Delhi:Boston, Hooughton Mifflin Company.
- Broudy, H. S., et al. (1973), *Philosophy of Educational Research*, New York, John Willey& Sons.
- Cohen, Louis (1976), *Educational Research in Classroom and Schools, A Manual ofMaterials and Methods*, New York, Harper and Row Publishers.
- Daramola. S.O. (1995): *Research Methodology in education: An Interdisciplinary Approach*. Universityof Ilorin. Library and Publication Committee
- Fajemidagba. M.O. ( 1995): *Research Methodology in Education: An Interdisciplinary Approach*. University of I l o r i n Library and Publication Committee.
- Fisher, R. A. (1936), *Statistical Methods for Research Workers*, Edinburg, Oliver and Boyd.
- Gardner, John(2012). *Assessment and Learning -2<sup>nd</sup> edition*. New Delhi: SAGE Publications India Pvt. Ltd.
- Herbert M. ( 1 9 9 5 ) . *Planning a Research: A Guide for Practitioners and 'trainees in the helping professional*. L o n d o n: C h a s s e 11 educational Limited.
- JnNurm(2003), *Research Reports*, London: Routledge Falmer
- Lindquist, E. F. (1963), *Design and Analysis of Experiments in Psychology and Education*.
- Lokesh Koul(2006), *Methodology of Educational Research*. Vikas Publishing House Private Limited. New Delhi.
- Mangal, S.K. & Na d Shubhra Mangal (2007), *Research Methodology in Behavioural Sciences*. New Delhi:PHI Learning Private Limited.
- Quinlan, Audrey M. A Complete Guide to Rubrics: Assessment Made Easy for Teachers, KDCollege(2012).USA:Rowman Littlefield Education.
- Singh, A.K. (2005), *Tests ,Measurements and Research methods in Behavioural Sciences*. Bharathi Bhavan Publishers and Distributers.
- Ogunniyi, M. B. (1984), *Educational Measurement and Evaluation*, Longman Nig. Mc. Ibadan.
- Okpalla P. M. et al (1999), *Measurement and Evaluation in Education*. Sticing – Horden Publishers (nig.) Ltd. Benin City. Inc.
- Sax, Gilbert (1979), *Foundations of Educational Research*, Engle Wood Cliffs N. J., Prentice Hall.
- Val, Klenowski.(2002). *Developing Portfolios for Learning and Assessment: Processes and Principles*. London. RoutledgeFalmer.
- Wyatt-Smith, Claire; Cumming, Joy (Eds.) (2009). *Educational Assessment in the 21st Century*. New Delhi: Springer.
- Zubizarreta ,John .(2009).*The Learning Portfolio: Reflective Practice for Improving Student Learning*. USA: Johnwilley and Sons. Inc
- [www.springer.com/education+%26+language/journal/11092](http://www.springer.com/education+%26+language/journal/11092)
- [www.researchphilosophy.blogspot.com/](http://www.researchphilosophy.blogspot.com/)
- [www.katho3.people.wm.edu/](http://www.katho3.people.wm.edu/)
- [www.adprima.com/measurement.htm](http://www.adprima.com/measurement.htm)
- [www.cmu.edu/teaching/design/teach/rubrics.html](http://www.cmu.edu/teaching/design/teach/rubrics.html).

## EDU – 09.1: Curriculum and Resources in Digital Era : Malayalam Education.

(theoretical Discourses – 60 hours & CE – 30 Hours)

### Objectives :

- To get acquainted with principles/concepts of curriculum construction, different types of curriculum.
- To get acquainted with National/Kerala curriculum framework, different types of curriculum etc.
- To understand concepts related community based teaching and learning
- To incorporate e- resources in the pedagogic content knowledge analysis of Malayalam
- To understand the basic theories/concepts/perspectives of language acquisition, Chomsky’s conceptions on language, the whole language approach etc.

### Contents :

**Unit – 1 :** Curriculum Design in Malayalam Education .

**Unit -2 :** Community Based Teaching and Learning of- Malayalam.

**Unit – 3 :** E-Resources in Teaching & Learning of – Malayalam -

**Unit – 4 :** Research Inputs Malayalam Learning -

**Unit – 5 :** Researches in language and Language Learning -

### Unit 1: Curriculum Design in Malayalam Education

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To get acquainted with principles/concepts of curriculum construction, National/Kerala curriculum framework, different types of curriculum etc.	<ul style="list-style-type: none"> <li>• Principles of curriculum construction</li> <li>• Curriculum and Syllabus</li> <li>• General Approach on language learning in National/Kerala curriculum framework</li> <li>• Different concepts in curriculum construction: Activity oriented, Issue based, Problem based curricula.</li> </ul>	<p>Open discussion on the suitability of present day school curriculum</p> <p>Preparation of an essay on general approach on language learning in</p>	<ul style="list-style-type: none"> <li>• Participation in discussion/Relevance of ideas</li> <li>• Essay</li> </ul>

		National/Kerala curriculum frameworks	
--	--	---------------------------------------	--

**Unit 2 Community Based Teaching and Learning of- Malayalam**

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
1. To understand concepts related community based teaching and learning	<ul style="list-style-type: none"> <li>• Library – as a community resource centre</li> <li>• Importance -Different types School/Class/Subject libraries – ways for effective organization.</li> <li>• Importance of agencies like Kerala Sahitya Academi, Kerala Bhasha Institute etc.</li> <li>• Major Malayalam Book stores and publishers - DC Books, NBS, Mathrubhoomi etc.</li> <li>• Local text</li> <li>• Co operative and collaborative learning/teaching</li> <li>• Language labs</li> </ul>	<p>Assignmments</p> <p>Prepration of short notes</p> <p>Seminar presentations</p> <p>Design and development of language lab activities</p>	<ul style="list-style-type: none"> <li>• Assignment papers</li> <li>• Appropriateness of presentations</li> <li>• Variety and suitability</li> </ul>

### Unit 3 E-Resources in Teaching & Learning of - Malayalam

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To get familiarized with the e- resources for teaching/learning Malayalam 2. To incorporate e-resources in the pedagogic content knowledge analysis of Malayalam	<ul style="list-style-type: none"> <li>• Applications for writing Malayalam - Google input tool etc.</li> <li>• Commercial typing software for Malayalam: ISM, iLEAp etc.</li> <li>• Design and development of Malayalam blogs.</li> <li>• Major useful sites for teaching and learning Malayalam.</li> <li>• Use of Social Networking sites in teaching and learning Malayalam language and literature</li> <li>• E- resources for teaching and learning Prose, Poetry and Grammar</li> <li>•</li> </ul>	Familiarisation session on applications/software/sites suitable for Malayalam teaching and learning  Design and development of a blog for Malayalam class  (group activity)  Practicum	<ul style="list-style-type: none"> <li>• Participation of students innovative ideas</li> <li>• Comprehensiveness</li> </ul>

### Unit 4 Research Inputs Malayalam Learning

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To understand the basic theories/concepts/perspectives of language acquisition, Chomsky's conceptions on language, the whole language approach etc.	<ul style="list-style-type: none"> <li>• Recent researches in Malayalam Language and Literature</li> <li>• Action Research</li> <li>• <b>Researches in language and Language Learning – New Perspectives</b></li> <li>• Language a biological triggered behavior</li> <li>• Language acquisition vs. Language learning.</li> </ul>	Seminar on conventional and new perspectives in learning language  Preparation of short notes on LAD,	<ul style="list-style-type: none"> <li>• Seminar paper/participation</li> <li>• Correctness of notes</li> <li>• Student participation</li> </ul>



	<ul style="list-style-type: none"> <li>• Language acquisition and cognitive development</li> <li>• The parameters of LAD and Universal Grammar</li> <li>• Chomsky on Language and thought</li> <li>• The whole Language Approach</li> </ul>	<p>universal Grammar</p> <p>Discussion on supplied reading materials.</p>	
--	---	---	--

**Reference**

- Anveshanangalkkuorukaippusthakam;

**EDU- 10.1 :Techno Pedagogic Content Knowledge Analysis-Malayalam.**

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

**Objectives :**

- To get familiarized with TPCK and Personalised instructional strategies
- To get acquainted with the concept ‘ teacher as a techno pedagogue ‘
- To get familiarized with the concepts of networking in Malayalam Learning
- To understand concept of ‘models of teaching’ and to practice various models
- To get familiarized with the new global trends in Malayalam education.

**Contents :**

**Unit – 1 : TPCK and Self Instructional Strategies (Teacher as a Techno-Pedagogue) - Personalised Instruction**

**Unit – 2 : Networking in Malayalam Learning.**

**Unit – 3 : Models of Teaching .**

**Unit – 4 : Global Trends in Malayalam Education .**

**Unit 1 TPCK and Self Instructional Strategies (Teacher as a Techno-Pedagogue)**

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
1. To get familiarized with TPCK and Personalised instructional strategies	<ul style="list-style-type: none"><li>• Techno Pedagogic Content Knowledge Analysis</li><li>• Effective use of technology in the transaction of content</li><li>• Personalised Instruction</li><li>• Programmed Instruction : Linear, Branched</li><li>• Instructional Modules</li><li>• Computer Assisted Instruction - CAI,</li><li>• Computer Managed Instruction-CMI</li></ul>	Discussion on reading materials given.  Preparation of modules  Workshop for the familiarization of CAI, CMI	<ul style="list-style-type: none"><li>• Participation</li><li>• Completeness and clarity</li><li>• Involvement in the workshop</li><li>• CE - Test</li></ul>

### Unit 2 Networking in Malayalam Learning

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To get acquainted with the concepts of networking in Malayalam Learning	<ul style="list-style-type: none"> <li>Major Malayalam blogs, facebook pages etc. for Malayalam Teaching and Learning</li> <li>Community extension activities</li> <li>Use of Malayalam Wikipedia- content generation.</li> <li>Use of Social networking sites in developing academic networks among teacher and students.</li> <li>Uses of YouTube</li> </ul>	<p>Active participation of students</p> <p>Opportunity to contribute innovative ideas</p> <p>Practical sessions based on blogs and other networking sources</p>	<ul style="list-style-type: none"> <li>Participation</li> <li>Innovative ideas and suggestions</li> <li>Relating to the content- different ways practiced</li> <li>CE - Practicals ( Two items)</li> </ul>

### Unit3 Models of Teaching

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To understand concept of 'models of teaching' and to practice various models	<ul style="list-style-type: none"> <li>Basic concepts</li> <li>Concept attainment model.</li> <li>Synecotics Model</li> <li>Role Play Model</li> <li>Advance Organiser</li> </ul>	<p>Preparation of lesson plans based on models of teaching</p> <p>Demonstrations on models of teaching</p> <p>Practice sessions based on models</p>	<ul style="list-style-type: none"> <li>Lesson plans</li> <li>Performance of the students</li> <li>CE - Subject Associated Activities</li> </ul>

### Unit 4 Global Trends in Malayalam Education

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To get familiarized with the new global trends in Malayalam education.	<ul style="list-style-type: none"> <li>• Global advancement of web Malayalam</li> <li>• Online Libraries</li> <li>• Online periodicals</li> <li>• Online publications</li> <li>• Mass Media</li> </ul>	<p>Familiarisation online publications</p> <p>Discussion about online periodicals/ publications.</p> <p>Preparation of a list of online libraries</p> <p>Assignment/ Debate on mass media</p>	<ul style="list-style-type: none"> <li>• Performance of the students</li> <li>• Discussions</li> <li>• Assignment paper/Participation and performance in debates</li> </ul>

#### Reference

Prof. MK Prasad	Kerala Shaasthrasaahitya Parishad	
Bhashapadanavum Bhodhana shaastravum	Dr.SreeVrinda Nair N	DC Books Kottayam
Bhashapadanavum Sidhaanthangalum	Dr.SreeVrinda Nair N	DC Books Kottayam
Divaswapna	GijubhaiBhadeka	National Book Trust
EnganeMalayalattilBlogam	Baburaj PM	DC Books, Kottayam
Gadyarachana	Dr.CK Chandrasekharan Nair	Kerala Bhasha Institute
Gadyashilpam	CV VasudevaBhattathiri	Kerala Bhasha Institute
Kerala Panineeyam	AR RajarajaVarma	DC Books, Kottayam
KuttikalePadanathilSahayikkam	PK Abdul Hammed Karassery	DC Books, Kottayam
MalayalaBhashaBodhanam	CV VasudevaBhattathiri	Kerala Bhasha Institute
MalayalaBhashadyapanam	Dr.KSivarajan	Calicut University
MalayalaKavithapadhanamgal	K Sachidanandan	Mathrubhoomi Books
MalayalaSahithyaCharithram	Dr. KalpattaBlakrishnan	Kerala Bhasha Institute
MalayalaSahithyaCharithram	PK Parameswaran Nair	Sahithya Academy
MalayalaSahithyaNiroopanam	Dr. PanmanaRamachandran Nair	Current Books, Kottayam

MalayalaSahithyaVimarshanam	Dr. SukumarAzheekkode	DC Books, Kottayam
Mathrubhashabhodhanam:		
Micro teaching	Allen,D& Ryan, K	Adison Wesley, London
MumbilullaJeevitham	J Krishnamoorthi	DC Books, Kottayam
Nalla Malayalam	CV VasudevaBhattathiri	DC Books, Kottayam
NammudeBhasha	EMS Namboothiripad	Kerala Bhasha Institute
Padyapadhathi sidhaantham	Dr. Ravisankhar S. Nair	Kerala Bhasha Institute
ParivarthanonmughaVidhyabhyabyasamGuru	NithyachaithanyaYathi	NarayanaGurukulam, Varkala
PravanathakalumReethikalum.	Bindhu,C.M	Scorpio, Calicut
PrayogikaVyakaranam	Irinjayam Ravi	
PurogamanaVidyabhyasachinthakal	PV Purushothaman	Kerala ShaasthrasaahityaParishad
Thettillatta Malayalam	Prof. PanmanaRamachandran Nair	DC Books, Kottayam
TirakkadhaRachana – KalayumSidhanthvum	Jose K Manuel	Current Books, Kottayam
Toto Chan	TetsukoKoriyoNagi	National Book Trust, Kerala
ShaasthrasaahityaParishad		
Tuition to Intuition	Dr. KN Anandan	Transcend, Malappuram
Ucharanamnannavan	Dr. VRPrabodhachandran	Kerala Bhasha Institute
VidhyabhyasathilViplavam	Osho	Silence, Kozhikkode
Vidyabhyasachinthakal	AsisTharuvana	Olive, Kozhikkode
VidyabhyasaParivarthanattinoruAmugham		Kerala ShaasthrasaahityaParishad
VyakaranaMitham	SheshgiriPrabhu	

### Online Resources

<http://ml.wikipedia.org>  
<https://www.facebook.com/groups/144983732246185>  
<https://www.facebook.com/groups/paribhasha>  
<http://www.keralasahityaakademi.org/>  
<http://malayalambloghelp.blogspot.com/>  
<http://www.topsite.com/best/malayalam>  
<http://malayalam.kerala.gov.in/index.php>  
[http://malayalaaikyavedi.blogspot.in/2015/04/blog-post\\_61.html](http://malayalaaikyavedi.blogspot.in/2015/04/blog-post_61.html)  
<http://www.facebook.com/pages/മലയാളപഠനബോധന-സഹായി/628705850559130?ref=hl>  
<http://bloghelpline.cyberjalakam.com/>  
<http://blogsahayi.blogspot.in/>

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

(Theoretical Discourses – 60 & CE – 30 hours )

### Objectives :

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

### Contents:

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

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

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. Familiarize student teacher with the principles of curriculum construction and organization 2. Grasp the relationship between curriculum and Syllabus	<ul style="list-style-type: none"> <li>• Principles of Curriculum construction and organization</li> <li>• NCF 2005, 2009, KCF 2007</li> <li>• Critical Pedagogy</li> <li>• Issue-based curriculum</li> <li>• Social constructivism</li> <li>• Curriculum and Syllabus, Curriculum-Types</li> <li>• Language Curriculum</li> <li>• Philosophical and Sociological</li> </ul>	Direct instruction  Intro talk on the different Frame work available  Verbal interaction  Preparation of Check list and group	<ul style="list-style-type: none"> <li>• Evaluationof entry made in ReflectiveJournal</li> </ul>

	<p>perspectives, Psychological and Linguistic Foundations</p> <ul style="list-style-type: none"> <li>• Criteria for Selection of content</li> <li>• Course book, Sourcebook</li> </ul>	analysis of CB	
--	--	----------------	--

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

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
1. Acquaint with teaching and learning resources available in formal and informal contexts	<ul style="list-style-type: none"> <li>• Teaching and learning resources</li> <li>• Formal &amp; Informal learning contexts</li> <li>• Role of Language Institutes and Local Library for learning English</li> <li>• Society as Language Lab – FilmTheatre</li> <li>• Literary clubs, Language forums</li> <li>• Interview and Talk by experts</li> <li>• Exposure to events of national importance</li> <li>• Inclusive Education- Concept, Need and significance; Ways of dealing with learners with LD/ Children with Special needs</li> </ul>	<p>Field visit</p> <p>Hands-on experience</p> <p>Group discussion</p> <p>Sharing of learning experience</p>	<ul style="list-style-type: none"> <li>• Surveying</li> <li>• Checklist</li> <li>• Presentation of Field visit reports</li> </ul>

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

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To analyze instructional materials in print and digital form for effective transaction	<ul style="list-style-type: none"> <li>• Educational Websites</li> <li>• Virtual Classrooms</li> <li>• On line language games- vocabulary, grammar, spelling etc.</li> <li>• E-Library</li> <li>• E-resources for Prose</li> <li>• Film adaptations - literature and social issues</li> <li>• Audio podcasts</li> <li>• Speeches</li> <li>• Pronunciation and Conversation practice Online</li> <li>• E-resources for Poems</li> <li>• Critique of poems on websites</li> <li>• Exploring text types Online</li> <li>• Descriptive – Narrative- Expository- Argumentative</li> <li>• Recitation</li> </ul>	<p>Presentation of specimen digital resources followed by critique on effectiveness</p> <p>Individual /Pair work</p> <p>Exploring online resources and preparing report</p>	<ul style="list-style-type: none"> <li>• Performance evaluation</li> <li>• Participant observation</li> </ul>

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

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To enable student teachers to promote student effort in learning	<ul style="list-style-type: none"> <li>• Research in English Language Education and Second Language Pedagogy</li> <li>• Identifying and locating significant concerns related to language learning</li> </ul>	<p>Intro lecture</p> <p>Enquiry centred discussion</p>	<ul style="list-style-type: none"> <li>• Style of presentation</li> <li>• Performance</li> <li>• Examine communicative competence</li> </ul>



	<ul style="list-style-type: none"> <li>• Action Research</li> <li>• Investigating any one learner issue</li> <li>• Review of Recent Research Studies in English Language</li> <li>• Place of English in Inter disciplinary studies-Current trends</li> </ul>	Group tasks by assigning specific roles	
--	--	---	--

## Reference

### Books:

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

### Journals:

- Interdisciplinary Strategies for English and Social Studies [http://apcentral.collegeboard.com/apc/public/repository/ap04\\_preap\\_1\\_inter\\_st\\_35891.pdf](http://apcentral.collegeboard.com/apc/public/repository/ap04_preap_1_inter_st_35891.pdf)
- Issue Theme: Interdisciplinary Synergy: Teaching and Learning in Collaboration. English Journal, Vol 103.No. 3 January 2014 <http://www.ncte.org/journals/ej/issues/v103-3>
- The sociology of language teaching and learning. Ravi Bhushan, Theory and Practice in Language Studies, Vol. 1, No. 3, pp. 309-311, March 2011.

### Select Online resources:

- Characteristics of a virtual classroom <http://www.learndash.com/characteristics-of-a-virtual-classroom/>

### Curriculum

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

### How to Critique Poetry

- <http://www.wikihow.com/Critique-Poetry>
- [http://www.writingroom.com/viewwriting/wr\\_how\\_to/How-To-Critique-A-Poem](http://www.writingroom.com/viewwriting/wr_how_to/How-To-Critique-A-Poem)
- Four Types of Writing: <http://hunbbel-meer.hubpages.com/hub/Four-Types-of-Writing>
- Free-ENGLISH.com: <http://www.free-english.com/english/Home.aspx>

### **Film adaptations**

- Adaptation- novel to film: [http://www.pbs.org/wgbh/masterpiece/learningresources/fic\\_adaptation.html](http://www.pbs.org/wgbh/masterpiece/learningresources/fic_adaptation.html)
- Adaptation: From novel to film: [http://d2buyft38glmwk.cloudfront.net/media/cms\\_page\\_media/11/FITC\\_Adaptation\\_1.pdf](http://d2buyft38glmwk.cloudfront.net/media/cms_page_media/11/FITC_Adaptation_1.pdf)
- Masterpiece theatre: [http://www.pbs.org/wgbh/masterpiece/learningresources/fic\\_about.html](http://www.pbs.org/wgbh/masterpiece/learningresources/fic_about.html)
- Inclusive education: <http://nvpie.org/inclusive.html>
- Internet TESL Journal, The <http://iteslj.org/>

### **Language forums**

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

### **Online Language Games**

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

### **Mobile learning**

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

### **Pronunciation practice online**

- 14 English pronunciation practice - ESL Spoken English lessons - Pronunciation common mistakes: <https://www.youtube.com/watch?v=Xm2RiCGEVPw>
- Pronunciation
- English Speaking Online: <http://www.englishspeakingonline.com/>
- Pronunciation tips: <http://www.bbc.co.uk/worldservice/learningenglish/grammar/pron/>
- Speaking & Pronunciation Practice: <http://esl-writingtutor.com/practice/speaking-pronunciation.html>

### **Podcasts**

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

### **ELT Research**

- Action research: <https://www.teachingenglish.org.uk/article/action-research>
- Directory of UK ELT Research 2005-12: <https://www.teachingenglish.org.uk/elt-research>
- Nellie' s English Projects: [http://www.nelliemuller.com/Action\\_Research\\_Projects.htm](http://www.nelliemuller.com/Action_Research_Projects.htm)

- The State of ELT Research in the UK: [http://resig.weebly.com/uploads/8/1/4/0/8140071/panel\\_discussion\\_report\\_part\\_1\\_--the\\_state\\_of\\_uk\\_elt\\_research.pdf](http://resig.weebly.com/uploads/8/1/4/0/8140071/panel_discussion_report_part_1_--the_state_of_uk_elt_research.pdf)
- Online research: <http://tewt.org/index.php/research>
- National Curriculum Framework 2005: <http://www.ncert.nic.in/rightside/links/pdf/framework/english/nf2005.pdf>
- The Speech Site: <http://thespeechsite.com/en/index.shtml>
- Tips on Reciting: <http://www.poetryoutloud.org/poems-and-performance/tips-on-reciting>
- 8 Current trends in teaching and learning EFL/ESL: <http://blog.tesol.org/8-current-trends-in-teaching-and-learning-efles/>

#### **Useful sites**

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

#### **e-Library**

- Hathi Trust's digital library: <http://www.hathitrust.org/>
- Open eBooks Directory: <http://e-library.net/>
- ProQuest eLibrary: <http://www.proquest.com/products-services/elibrary.html>

#### **e-Resources for prose**

- Early English Prose Fiction (ProQuest): <https://library.rice.edu/collections/eresources/early-english-prose-fiction-proquest>
- e-Resources for poem: <http://www.poetryfoundation.org/learning/resources>
- New E-Resources: [http://hul.harvard.edu/ois/news/2014/html/2014-12-01\\_1049\\_system.html](http://hul.harvard.edu/ois/news/2014/html/2014-12-01_1049_system.html)
- Resources for English and American Literature: <http://www.lib.cam.ac.uk/eresources/subjectresources.php?subjectId=36>
- Education sites: <http://www.topedusites.com/>
- ESLflow : <http://www.eslflow.com/>
- Learn English Central (British Council): <http://www.learnenglish.org.uk/>
- One Stop English Magazine: <http://www.onestopenglish.com/>
- TEFL.NET : <http://www.tefl.net/index.html>

## EDU - 10.2: Techno Pedagogic Content Knowledge Analysis: English

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

### Objectives

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

### Contents

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

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

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. Familiarizes with the concept of teacher as Techno-pedagogue 2. Identifies the inter-relationship between Content Knowledge, Pedagogic Knowledge and Technological Knowledge	<ul style="list-style-type: none"> <li>• Techno-Pedagogy</li> <li>• Content Knowledge</li> <li>• Pedagogic Knowledge</li> <li>• Technology Knowledge</li> <li>• Teacher as a Techno-Pedagogue</li> <li>• Nature and scope of Self instructional Strategies</li> <li>• Programmed Instruction - Linear-Branching</li> <li>• Self Instructional modules</li> <li>• Computer Assisted Instruction(CAI)</li> <li>• Computer Based Instruction (CBI)</li> <li>• Computer Assisted Language Learning (CALL)</li> </ul>	Comparison of same content available in different digital formats  Group task to identify effectiveness of different digital content in realizing proposed learning objectives.  Demonstration of teaching content with	<ul style="list-style-type: none"> <li>• Preparation of computer-based instructional material</li> </ul>

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

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

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
1. Familiarizes with ways of exploiting Internet resources for both knowledge enrichment and instruction 2. Develops necessary skills for transmission of information and content using websites	<ul style="list-style-type: none"> <li>• Networking:</li> <li>• Teacher –Teacher; Teacher-Institution; Teacher-Student</li> <li>• Forum , Wiki, Blog</li> <li>• Video Conferencing</li> <li>• Professional communities -English Teacher Blogs</li> <li>• Teacher Tube</li> <li>• ESL Café</li> <li>• LinkedIn</li> <li>• Content writing</li> <li>• Copy Writing</li> <li>• Outsourcing</li> <li>• Transcription</li> <li>• Learning Management System</li> <li>• Scope</li> <li>• Storage</li> <li>• Collaboration</li> </ul>	Introductory talk  Demo in Smart Classroom  Pair-share  Collaborative tasks	<ul style="list-style-type: none"> <li>• Group presentation</li> <li>• Monitoring of activities in virtual world</li> <li>• Checking Popularity on Web</li> </ul>

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

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
1. Familiarizes with Models of Teaching as an instructional design and identifies ways of employing them for teaching Prose, Poetry, Vocabulary and Grammar	<ul style="list-style-type: none"> <li>• *Dimensions of a Model- Syntax, Social System, Principles of Reaction, Support System Instructional and nurturant effects</li> <li>• -Direct Instruction Model</li> <li>• -Concept Attainment Model</li> <li>• -Advance Organizer Model</li> <li>• -Synectics Model</li> <li>• -Role Play Model</li> </ul>	<p>Distribution of Specimen Lessons based on specific Models</p> <p>Group tasks for preparing lessons based on specific Models</p> <p>Assimilation and accommodation</p>	<ul style="list-style-type: none"> <li>• Ability to transact the content/ realize objectives in the plans prepared</li> <li>• Checking effectiveness of Lesson Plans based on specific</li> <li>• Models for chosen content</li> </ul>

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

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
<ol style="list-style-type: none"> <li>1. Familiarizes with global trends in Language education</li> <li>2. Familiarizes with aspects related to translation</li> <li>3. Gets an awareness of digital resources for Online tutoring</li> </ol>	<ul style="list-style-type: none"> <li>• Exercises and pedagogic practices in countries where English is treated as L<sub>1</sub></li> <li>• Exercises and pedagogic practices in Asian countries as ESL</li> <li>• Literary Translation as an exercise- poetry, fiction, prose, world classics from India, translation from Malayalam Literature, critical essays etc.</li> <li>• Journal Clubs – Review and discussion of studies and articles in Journals</li> </ul>	<p>Lecture-cum-discussion on different pedagogical practices.</p> <p>Close reading of literary texts followed by group translation</p>	<ul style="list-style-type: none"> <li>• Prepares samples</li> <li>• Peer evaluation</li> <li>• Performance in tests</li> </ul>

	<ul style="list-style-type: none"> <li>• Production of digital resources for Online tutoring</li> </ul>	<p>Comparison of articles in journals and magazines to identify form and style required for journal articles followed by critique of articles written by peers</p> <p>Critique of specimen digital resources followed by design and preparation of digital resources for Online tutoring</p>	
--	---	--	--

## References

### Books:

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

### Journals:

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

### Online references:

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

- **Content Based Instruction in EFL Contexts.** Stephen Davies, :The Internet TESL Journal, Vol. IX, No. 2, February 2003.  
<http://iteslj.org/Articles/Davies-CBI.html>
  - **Critical ELT Practices in Asia Key Issues, Practices, and Possibilities.**: Kiwan Sung and Rod Pederson (Eds.) Transgressions: Cultural Studies and Education Volume 82. Sense Publishers <https://www.sensepublishers.com/media/209-critical-elt-practices-in-asia.pdf>
  - **Educational Blogging:** <http://tewt.org/index.php/discussion-collaboration/blogs>
  - **E-tivities with a Wiki: Innovative Teaching of English as a Foreign Language:** <http://eunis.dk/papers/p87.pdf>
  - **How to Write and Publish an Academic Research Paper:**  
[http://www.journalprep.com/FILES/How\\_to\\_Write\\_and\\_Publish\\_an\\_Academic\\_Research\\_Paper.pdf](http://www.journalprep.com/FILES/How_to_Write_and_Publish_an_Academic_Research_Paper.pdf)
- Online reading material**
- [http://www.gutenberg.org/wiki/Main\\_Page](http://www.gutenberg.org/wiki/Main_Page)
  - <http://onlinebooks.library.upenn.edu/archives.html>
- Online tutoring platforms**
- <https://buddyschool.com/>
  - <http://www.tutorvista.co.in/index.php>
  - <https://www.smarthinking.com/services-and-subjects/services/live-online-tutoring/>
- Quick guide to LMS:** <http://edudemic.com/2012/10/a-quick-guide-to-learning-management-systems/>
- **Rubrics for Web Lessons:** <http://webquest.sdsu.edu/rubrics/weblessons.htm>
  - **Select Podcasting Sites:** English as a Second Language Podcast: <http://www.eslpod.com>
  - **Specimen Linear Programme for teaching Grammar:** <http://programmedinstruction.tiddlyspot.com/#Nouns-17>
  - **Teaching English in the Digital Age:** <http://digitalenglish.weebly.com/>
  - **Translation activities in the language classroom:** <https://www.teachingenglish.org.uk/article/translation-activities-language-classroom>
  - **Using computers in language teaching:** <http://esl.fis.edu/teachers/support/teach.htm>
  - **Using Videoconferencing to Facilitate Various Perspectives on the Teaching and Learning Process** Farren, M. (2002)  
<http://www.computing.dcu.ie/~mfarren/perspectives.htm>
- What is technological pedagogical content knowledge?:** Koehler, M. J., & Mishra, P. (2009), Contemporary Issues in Technology and Teacher Education.9(1), 60-70.<http://www.citejournal.org/articles/v9i1general1.pdf>
- **Writing a journal article review:** <https://academicsskills.anu.edu.au/resources/handouts/writing-journal-article-review>
  - **12 Content-writing secrets of professional writer***The Advanced Content Marketing Guide.* Neil Patel and Kathryn Aragon.  
<http://www.quicksprout.com/the-advanced-guide-to-content-marketing-chapter-5/>



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

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

### Objectives

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

### CONTENTS :

**Unit 1 Curriculum Designing in Hindi Education**

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

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

**Unit 4 Research Trends in Hindi Education**

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

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. Get acquainted with the modern principles and trends in curriculum construction and designing of instructional materials for curriculum transaction	<ul style="list-style-type: none"> <li>• Curriculum – Concepts and principles of curriculum construction</li> <li>• Approaches, types of curriculum</li> <li>• Curriculum and Syllabus.</li> <li>• Preparation and designing of curriculum transaction material for Hindi language instruction: Designing of student-teacher generated Digital texts, adapting free downloadable digital resource in Hindi, Familiarising with the use of basic tools and software in Hindi -Google transliteration (for Hindi typing), Hindi online dictionaries –</li> </ul>	Analytical approach Seminar Lecture Co-operative learning Workshop Library works Utilisation of web resources	<ul style="list-style-type: none"> <li>• Group investigation summary reports</li> <li>• Authenticating the trustworthiness of the networking resources – by peers and mentor</li> </ul>

	www.shabdKosh.com, Collection of Hindi sites - <a href="http://dir.hinkhoj.com">http://dir.hinkhoj.com</a> , Searching Wikis for collecting materials for classroom instruction		
--	---	--	--

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

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
1. Develop a desire to take active involvement in social and community affairs and develop skills in public relation 2. Acquaint with teaching and learning resources available in formal and informal contexts 3. Equip to systematically correlate instructional practices with the society	<ul style="list-style-type: none"> <li>• School and community based instructional resources, school to the community and community to the school, social and community involvement activities</li> <li>• Formal and Informal learning contexts</li> <li>• Role of PTA, MPTA</li> <li>• Society as language lab: Film, Theatre</li> <li>• Field visit, visit to central Govt institutions, interaction with native Hindi speakers, visiting institutions that promote Hindi language namely Kerala Hindi Prachar Sabha, Dakshin Bharat Hindi Prachar Sabha, Regional Hindi Directorates etc., visit to SCERT, NCERT</li> <li>• Organizing co-curricular activities: language forums, Hindi literary clubs and day celebrations</li> <li>• Need and importance of library in Hindi education, developing library skills</li> </ul>	Discussion Field visit Hands-on experience Project method Visit to institutions	<ul style="list-style-type: none"> <li>• Prepare a list of community resources- discuss and present the ways to utilize the community resources</li> <li>• Report on field study</li> <li>• Surveying</li> </ul>

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

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
1. Analyze Hindie-resources in instructional practices 2. Familiarize with on- line resources,softwares and social networking 3. Explore and practice infotainment activities in language	<ul style="list-style-type: none"> <li>E-resources: utilization of e- resources, web resources, need for Hindi e-resource pooling and development of e-portfolio, M-learning as a pervasive method for effective Hindi instruction, e-learning, web based learning.</li> <li>Learning management system (LMS) in teaching learning of Hindi education— Familiarize with transliteration software for Hindi typing and editing,Formation of Hindi Net groups/online communities, e-content in Hindi for enhancing students language attainment- social networking, developing Blogs and posts in blogs, e-journals, pod casting, IT enabled instructional resources: On line resources, videos, YouTube resources, animations, film clippings, online Hindi lessons</li> </ul> ( HINDI PAAD)	Online learning  Demonstration  Individual/ group work  Web search	<ul style="list-style-type: none"> <li>Assessing the preparation of e-learning material</li> <li>Preparing report on online resources</li> </ul>

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

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
1. Grasp the need and scope of research in Hindi instruction 2. Develop research aptitude, and inquiry skills	<ul style="list-style-type: none"> <li>An introduction to Research in Education- Need and scope of research in teaching-learning Hindi, need for developing innovative techniques and strategies</li> </ul>	Group Discussion  Prepare a note/paper (utilizing internet) on the latest research findings on	<ul style="list-style-type: none"> <li>Evaluation of seminar presentation skill</li> <li>Performance assessment</li> <li>Examine communicative competence</li> </ul>

	<ul style="list-style-type: none"> <li>• Hindi teacher as a researcher</li> <li>• Analysis of Research outcomes in Hindi education with respect to teaching and learning</li> <li>• Action Research</li> </ul>	<p>pedagogical aspects in Hindi</p> <p>Group Seminar</p> <p>Action Research Project</p>	
--	--	---	--

### EDU- 10.3 : TECHNO PEDAGOGIC CONTENT KNOWLEDGE ANALYSIS – HINDI

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

#### Objectives

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

#### Contents :

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

**Unit 2** Networking in Hindi Learning

**Unit 3** Models of Teaching in Hindi

**Unit 4** Global Trends in Education

#### Unit 1 Techno Pedagogic Content Knowledge Analysis (TPCK) and Self Instructional Strategies (18 Hrs+7 Hrs)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. Acquire the concept of teacher as techno- pedagogue and become aware of the concept TPCKA 2. Become conversant with technology enhanced learning 3. Get acquainted with the self instructional strategies and need of creating e-mail and blogs for pedagogical analysis	<ul style="list-style-type: none"> <li>• Inter relationship between Technology, Pedagogy and Content, Teacher as Techno-Pedagogue</li> <li>• Scope of Techno-Pedagogic Content Knowledge Analysis</li> <li>• TPCK based content analysis of text books in Hindi from std V11 to X11</li> <li>• Creating technology enhanced learning environment, 21<sup>st</sup> century skills</li> <li>• Collections of links to websites in Hindi, e-Newspapers and e-journals</li> </ul>	TPCK based content analysis through peer discussion and teacher intervention  Demonstration  On line and off line learning  Group discussion	<ul style="list-style-type: none"> <li>• Prepare a self explanatory note on ‘Teacher as a Techno-Pedagogue’</li> <li>• Document analysis</li> </ul>

	<ul style="list-style-type: none"> <li>• Self instructional strategies: Digital portfolio,online collaboration,use of multi media,web-portal,e-learning, technology integrated Problem Solving Learning, Computer Assisted Learning Packages, preparation of self instructional modules, creation of e-mail ID and blogs, preparation of PowerPoint presentations</li> <li>• Internet as a research and communication tool, using search engines, chat rooms, blogs to encourage peer interaction / expert consultation / collaborative projects</li> </ul>	Power point presentation	
--	---	--------------------------	--

### Unit 2 Networking in Hindi Learning (12 Hrs+ 6 Hrs)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. Develop the ability to acquaint with the various modes of networking for effective language instruction 2. Equip to generate avenues for networking as a means to enhance Hindi language learning	<ul style="list-style-type: none"> <li>• Professional and Institutional growth: student and institution networking</li> <li>• e-twinning</li> <li>• Collaboration with any institution's online portal for institutional and professional growth</li> <li>• Online learning: concept and system of online learning, virtual learning, creating social online groups for promoting teaching-learning of Hindi, Hindi language translation sites and softwares-Translation Buddy.com/Hindi</li> <li>• Applications of Social Networking systems, online reflection using blogs, online forums and Hindi communities, communication</li> </ul>	Utilising e-learning resources  Virtual tour to digital learning platforms  Downloading / pooling competency enhancement packages/ resources  Workshop  Postings in blogs	<ul style="list-style-type: none"> <li>• Performance assessment and feedback</li> <li>• Evaluation of Online Assignments</li> </ul>

	sites, preparation of online notes <ul style="list-style-type: none"> <li>• Awareness of student safety on the Internet, Copyright Issues and International Copyright laws regarding computer technology and Internet</li> </ul>		
--	---	--	--

### Unit 3 Models of Teaching (14 Hrs + 9 Hrs)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. Familiarizes with different types of Models of Teaching as an instructional design	<ul style="list-style-type: none"> <li>• Models of Teaching – Introduction and definition, dimensions of a model, classification of models, types and families</li> <li>• Designing of effective Models for Hindi language learning – Concept Attainment Model, Role-Play Model, , Inductive – Deductive Thinking Model, Advance Organizer Model, Synectics Model – theory and classroom practices, preparation of lesson templates for each model</li> </ul>	Demonstration of models of teaching  Preparation of lessons based on models of teaching  Simulation	<ul style="list-style-type: none"> <li>• Experience sharing</li> <li>• Assessment of lesson plans</li> <li>• using different models of teaching</li> <li>• Peer assessment</li> <li>• Examine the level of participation</li> </ul>

### Unit 4 Global Trends in Hindi Education (16 Hrs + 8 Hrs)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. Familiarizes with global trends in language education 2. Analyze the scope of Hindi language in the global context	<ul style="list-style-type: none"> <li>• Importance of Hindi as link language in the global context</li> <li>• Hindi education and job opportunities in the global context</li> <li>• Global trends in Hindi education</li> <li>• Hindi language education in India and Gulf countries</li> </ul>	<ul style="list-style-type: none"> <li>• Discussion</li> <li>• Brain storming</li> <li>• Problem solving</li> <li>• Concept maps</li> <li>• Online learning</li> <li>• Assignment</li> <li>• Report</li> </ul>	<ul style="list-style-type: none"> <li>• Presentation</li> <li>• Assessment of assignment/report</li> </ul>

## EDU - 09.4 : CURRICULUM AND RESOURCES IN DIGITAL ERA: SANSKRIT EDUCATION.

[THEORETICAL DISCOURSES - 60HOURS+ CE -30HOURS]

### OBJECTIVES :

- To understand and analyse the curriculum and text books of Sanskrit from std 7-12 prepared by SCERT based on the theoretical principles of curriculum construction.
- To identify and to understand the Community based teaching learning resources in Sanskrit.
- To familiarize and practice e-resources in teaching and learning of Sanskrit.
- To conduct action researches based on classroom practices.

### CONTENTS :

UNIT -1	CURRICULUM DESIGNING IN SANSKRIT EDUCATION
UNIT II-	COMMUNITY BASED TEACHING AND LEARNING OF SANSKRIT
UNIT III-	E- RESOURCES IN TEACHING AND LEARNING OF SANSKRIT
UNIT IV-	RESEARCH INPUT IN SANSKRIT LEARNING

### Unit-1 curriculum designing in Sanskrit education[15HOURS+6HOURS]

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To understand and analyse the curriculum and text books of Sanskrit from std 7-12 prepared by SCERT based on the theoretical principles of curriculum construction.	<ul style="list-style-type: none"><li>• Principles of Curriculum construction and organization- General principles of curriculum construction.-Concentric and spiral approaches. Psychological and logical approaches. Modern trends in curriculum. Review of NCF2005,2009,KCF 2007, Theoretical base of kerala Curriculum framework.- critical pedagogy, issue based – curriculum-social constructivism-Outcome based Learning. curriculum-and Syllabus - Curriculum-Types -Importance of Curriculum-Present position of Sanskrit in school Curriculum. Approach to language</li></ul>	Discussion. Lecture method. Meaningful verbal expression. Review. Presentation. Brain storming.	<ul style="list-style-type: none"><li>• Optional level focused group discussion.</li><li>• Participant observation-</li><li>• Observation.</li><li>• Examine the level of participation</li><li>• Participant observation.</li><li>• Participation.</li><li>• Observation.</li><li>• Observation and Criticism.</li><li>• Test-5Marks.</li></ul>



	<p>syllabus design-First language –second language- issue based Inclusion of classical and vedic literature-treatment of grammar alenkara and vretta. Time allotted to various stages -. Critical study of Sanskrit syllabus.</p>	<p>Discussion lessons- Designing templates and recording-5-and models of teaching-3 out of 5.-15 marks.</p> <p>Demonstration [observation and recording]-2.</p> <p>Criticism- performance,observation, and recording-5 and models of teaching-3 out of 5.</p> <p>Critical analysis.</p>	
--	---	---	--

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

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
1. To identify and to understand the Community based teaching learning resources in Sanskrit.	<ul style="list-style-type: none"> <li>Teaching and Learning resources. School, Library,Literary clubs, Language lab,Community-Formal and Informal Learning. Role of Language Institutes and Local Library for Learning Sanskrit. Society as Language Lab. –Film Theatre-Language Forums-Interview and talks by experts. Exposure to events of national importance.Sanskritotsava-Sanskrit day</li> </ul>	<p>Discussion.</p> <p>School induction programme.</p>	<ul style="list-style-type: none"> <li>Role performance.</li> <li>Based on report and participant observation.</li> <li>Participant observation.</li> <li>Analysis and mapping.</li> <li>Observation.</li> <li>Analysis the group discussion.</li> <li>Participant observation.</li> <li>Practicum-10 Marks.</li> </ul>

	<p>celebrations-Observation of kalidasa and vyasa jayanthi. Visit to various historical places and importance of sanskrit - archeology museum, mural paintings, Sanskrit universities, kalamandalams, panmana asramam, Rashtreya samskrita samstan puranattukara etc. Inclusive Education-Concept, Need and Significance, Ways of dealing with learners with LD/Children with special needs.</p>	<p>Buzz session. Mind mapping. Presentation. Narrative expression session in small or medium groups. Community living camps. Visits. Interview.</p>	
--	--	---	--

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

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
1. To familiarize and practice e-resources in teaching and learning of Sanskrit.	<ul style="list-style-type: none"> <li>Definition-Identification of e-resources. M-Learning in SLT-Sanskrit related Websites.—Virtual Classrooms- E-Library. E-Resources for Prose and Poems.</li> </ul>	<p>Demonstration and lecturing. Assaigments for preparing lessonplans based on E resources. Meaning full verbal expression. Video script- Developing, enacting,</p>	<ul style="list-style-type: none"> <li>Observation.</li> <li>Participant observation.</li> <li>Role performance.</li> <li>Participant observation.</li> </ul>

		recording and uploading-1- 10 marks.  Or  ICT based Lesson designing and uploading in Blog-1  Presentation.	
--	--	---	--

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

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
1. To Conduct action researches based on classroom practices.	<ul style="list-style-type: none"> <li>The importance of Research-Scope- Identifying and locating significant concerns related to the learning of the Sanskrit language learning-Action Research- Meaning and scope of action research. Investigating any one learner issue-Review of recent Research studies in Sanskrit language. Current trends.</li> </ul>	Lecture cum discussion.  Demonstration.  Lecture method.  Group discussion.  Data collection .Preparation of tools. Report writing.  Document analysis and Presentation.	<ul style="list-style-type: none"> <li>Observation.</li> <li>Written test.</li> <li>Valuation of reports.</li> <li>Role performance.</li> <li>Evaluation of daily reflective journals.</li> <li>Participant observation.</li> <li>Seminar/Presentation.-5-Marks.</li> </ul>

## EDU – 10 .4 : TECHNO PEDAGOGIC CONTENT KNOWLEDGE ANALYSIS :SANSKRIT.

[Transactional hours -60+ CE – 30 hours]

### OBJECTIVES :

- To develop teacher as a Techno- pedagogue
- To familiarize with the concept of teacher as a techno-pedagogue.
- Identifies ways of professionalizing Language education in a techno-pedagogic scenario.
- To practice networking activities and related resources
- To understand the Global trends in Sanskrit Education.

### CONTENTS :

- UNIT-I TPCCK AND SELF INSTRUCTIONAL STRATEGIES.  
UNIT-II NET WORKING IN LANGUAGE LEARNING.  
UNIT-III MODELS OF TEACHING IN LANGUAGE PRACTICE.  
UNIT IV GLOBAL TRENDS IN SANSKRIT LANGUAGE EDUCATION.

### UNIT I - TPCCK AND SELF INSTRUCTIONAL STRATEGIES.[15HOURS+8HOURS]

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To develop teacher as a Techno-pedagogue.	<ul style="list-style-type: none"><li>• Techno-Pedagogy, Content knowledge, Pedagogic Knowledge, Technological Knowledge-Teacher as a Techno-Pedagogue, Nature and scope of self instructional strategies. Programmed instruction-Linear-Branching-Self instructional Modules-Computer Assisted instruction CAI-Computer based instruction CBI-Computer Assisted Language Learning CALL.</li></ul>	Lecture cum Demonstration. ICT based Lesson Template. Group discussions. Preparation of programmed instructional materials.	<ul style="list-style-type: none"><li>• Participant observation.</li><li>• Discussion and Participant observation.</li><li>• Analysis the role performance.</li><li>• Performance.</li><li>• Role performance.</li><li>• Test- 5 Marks.</li></ul>

		<p>Presentation.</p> <p>School induction programme for one week.-15 marks.</p> <p>Observation of model lessons-2 nos-and reporting during school induction-10 marks.</p>	
--	--	--	--

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

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
1. To practice networking activities and related resources.	<ul style="list-style-type: none"> <li>Net Working:-Teacher-Teacher; Teacher-Institution; Teacher-Student. Forum-Wiki-Blog-Video Conferencing. Professional Communities-Sanskrit teacher Blogs-Teacher Tube--. Content Writing-Copy Writing-Out sourcing-Transcription. Learning Management system-Scope-Storage-Collaboration.</li> </ul>	<p>Lecturing and Demonstration.</p> <p>Group discussion about the possibilities of Net working in language learning.</p> <p>Presentation.</p>	<ul style="list-style-type: none"> <li>Observation.</li> <li>Role performance.</li> <li>Participant observation.</li> <li>Performance.</li> <li>Association activity-5Marks.</li> </ul>

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

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
1. To prepare different types of Models of Teaching.	<ul style="list-style-type: none"> <li>Dimension of a Model-Syntax, Social System, Principles of Reaction, Support system, Instructional and Nurturant effects. . Concept attainment model, Enquiry Training Model, Advance Organizer Model, Synectics Model, Role play Model</li> </ul>	Lecture cum Demonstration. Group discussion. Narrative expression. Lesson plan and demonstration class. Criticism Lessons. Presentation.	<ul style="list-style-type: none"> <li>Observation.</li> <li>Role performance.</li> <li>Participant observation.</li> <li>Role performance.</li> <li>Performance observation and recordings.</li> <li>Performance.</li> </ul>

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

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
1. To understand the Global trends in Sanskrit Education.	<ul style="list-style-type: none"> <li>Global trends-Its Meaning-Scope-Significance. Learning of Sanskrit in different Countries-Switzerland, Germany Austreliya, Arjentina, Britain, Thailand, United States, France, Japan, Nepal . Curriculum of Sanskrit in different Countries [-School-Higher Education-Research.</li> <li>Non formal way of Learning Sanskrit in these countries-Spiritual learning in schools.Practice of Yogasanas, Pranayama ,</li> </ul>	Demonstration. Group discussion. References/Internet. Collect resources. Collection of	<ul style="list-style-type: none"> <li>Observation.</li> <li>Role performance.</li> <li>Individual assessment.</li> <li>Presentation.</li> <li>Presentation.</li> <li>Participant observation.</li> <li>Assignment.</li> <li>Role performance.</li> <li>Peer instruction.</li> </ul>

	<p>Dhyana etc. Influence of Sanskrit literature on spirituality and existing spiritual practices like Art of living, Isha Yoga, Sahajamargam, Reiki etc. Daily reading of Ramayana, Bhagavadgita, Bhagavata .Stotrautras. Daily prayers of all religions.</p> <ul style="list-style-type: none"> <li>• Spiritual leaders contribution to Sanskrit- Chattambiswamikal, Sreenarayanaguru, Sankaracharya. Swami Vivekananda.</li> <li>• Influence of Sanskrit to various cultures- Thailand, Indonesia, etc.</li> <li>• Comparative Education as a new Subject- Comparison with other languages [English, Malayalam, Hindi]</li> <li>• Contribution of Sanskrit other disciplines, Medicine, Ayurveda, Music, Agriculture, Law etc.</li> </ul>	<p>knowledge.</p> <p>Group Discussion.</p> <p>Collect resources.</p> <p>Discussions.</p> <p>Meaning full verbal expressions.</p> <p>Presentation.</p>	<ul style="list-style-type: none"> <li>• Performance.</li> <li>• Practicals-10- Marks.</li> </ul>
--	---	---	---

## EDU.09.5 : CURRICULUM AND RESOURCES IN DIGITAL ERA – Arabic Education

[Transactional hours -60+ CE – 30 hours]

### Objectives:

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

- Familiarize with the principles of curriculum construction and organization
- Acquaint with teaching and learning resources available in the formal and informal contexts
- Develop the ability to prepare instructional materials in various forms for effective transaction
- Explore and practice infotainment activities in language
- Enable to promote student effort in learning
- Equip to manage diverse learner needs in language classes
- Develop interest in innovative practices in the field of Arabic Language Teaching and learning

### Contents

- UNIT I:** CURRICULUM DESIGNING IN ARABIC LANGUAGE EDUCATION  
**UNIT II:** COMMUNITY BASED TEACHING & LEARNING OF ARABIC LANGUAGE  
**UNIT III:** E-RESOURCES IN TEACHING & LEARNING OF ARABIC LANGUAGE  
**UNIT IV:** RESEARCH INPUTS IN ARABIC LANGUAGE LEARNING

### UNIT I: CURRICULUM DESIGNING IN ARABIC LANGUAGE EDUCATION CURRICULUM

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. Familiarizes with the principles of curriculum construction and organization 2. Acquaints with various trends in modern language curriculum	<ul style="list-style-type: none"> <li>• Curriculum: Meaning, Definition &amp; Principles</li> <li>• Approaches to curriculum construction</li> <li>• Curriculum and syllabus, Types of Curriculum, language curriculum</li> <li>• Criteria for selecting curriculum content</li> <li>• Modern Trends in Curriculum Construction:</li> <li>• Life Centered- Learner Centered,- Activity</li> </ul>	Introductory Lecture  Discussion  Group Discussion	<ul style="list-style-type: none"> <li>• CE</li> <li>• Assignments</li> <li>• Discussion reports</li> <li>• Debate</li> <li>• Class test</li> <li>• TE</li> </ul>



	<p>Centered, Issue Based, Problem Pausing, Process Oriented</p> <ul style="list-style-type: none"> <li>• NCF(2005), KCF(2007)</li> <li>• A critical review of Arabic Curriculum of state schools of Kerala</li> </ul>	<p>Observation</p> <p>Narration</p>	
--	---	-------------------------------------	--

## UNIT II: COMMUNITY BASED TEACHING & LEARNING OF ARABIC LANGUAGE

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
<ol style="list-style-type: none"> <li>1. Acquaints with teaching and learning resources available in the formal and informal contexts</li> <li>2. Develops the skill of applying community based learning resources in teaching and learning</li> </ol>	<ul style="list-style-type: none"> <li>• Community Based Teaching and Learning Resources: Formal &amp; Informal learning contexts</li> <li>• Role of University Departments, Arabic Colleges, Dars system, Religious madrasas</li> <li>• Society as Language Lab</li> <li>• Role of films and Theatres, Newspapers, Magazines &amp; Electronic Medias etc.</li> <li>• Language forums, Interview &amp; Talks by Experts, Exposure to events of National Importance; Celebration of International Arabic Day</li> </ul>	<p>Introductory Lecture</p> <p>Discussion</p> <p>Group Discussion</p> <p>Observation</p> <p>Narration</p>	<ul style="list-style-type: none"> <li>• CE</li> <li>• Observation</li> <li>• Discussion report</li> <li>• Assignments</li> <li>• TE</li> </ul>

## UNIT III: E-RESOURCES IN TEACHING & LEARNING OF ARABIC LANGUAGE

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
<ol style="list-style-type: none"> <li>1. Explores and practice infotainment activities in language teaching</li> <li>2. Develops interest in innovative practices in the field of Arabic</li> </ol>	<ul style="list-style-type: none"> <li>• E- learning and E teaching:</li> <li>• Digital text books/E-book, Digital library &amp; other online resources</li> <li>• Designing of Digital text books , e-books and</li> </ul>	<p>Introductory Lecture</p> <p>Discussion</p>	<ul style="list-style-type: none"> <li>• CE</li> <li>• Workshop report</li> <li>• Discussion report</li> <li>• Observation</li> </ul>

Language Teaching and learning	its application <ul style="list-style-type: none"> <li>• Adopting down loaded resources for teaching Arabic</li> <li>• M-learning: Smart phones as Learning Devices and its scope</li> </ul>	Group Discussion Observation Narration	<ul style="list-style-type: none"> <li>• TE</li> </ul>
--------------------------------	--	--	--

#### UNIT IV: RESEARCH INPUTS IN ARABIC LANGUAGE LEARNING

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To review and disseminate the recent researches in the field of Arabic language 2. Equips to manage diverse learner needs by conducting actions Research in Arabic Language Education	<ul style="list-style-type: none"> <li>• Researches in Arabic Language Education and Second Language Pedagogy</li> <li>• Identifying and locating significant concerns related to Arabic language learning</li> <li>• Action Research –Investigating learner issues</li> <li>• Review of Recent Research Studies in Arabic Language Education</li> <li>• Place of Arabic language as a source of knowledge</li> </ul>	Introductory Lecture Discussion Group Discussion Observation Narration	<ul style="list-style-type: none"> <li>• CE</li> <li>• Reports</li> <li>• Assignments</li> <li>• TE</li> </ul>

#### References:

- Thatweeru Adai -al Muallim; kifayathu thaaleem wa thahleel al muthawasila : Hashim Uwaidha, Dar al Ilm al Malayeen , Labanan
- Thaaleemu al lugha al arabiyya baina nadriyya wa thathbeeq: Dr Hasan Al Shahatha, Dar Misriyya wa llubnaniya
- Thareeqathu Thadreesi Wa strateejiiyyathuhu: Dr Muhammed Mahmmod al Haila, Dar Al Kitab Al Jamia, Al ain, UAE
- Thaaleem al lugha al Arabiya lighairi al nathiqeena biha : Makthab al tharbiyya al Arabi liduwal al Khaleej
- Thuruqu thadrees al lugha al Arabiyya lil madaris al muthawassitha wa thanaiyya : Hasan Mulla Uthman ; Dar alam al Kuthub lithbaa wa nnashshr wa thouzeea, Riyadh, KSA
- Thaqnolojiya al Thaaleem; Al wasail al thaaleemiyya wa thaqniyyath al thaaluum: Dr. Muhammed Assam Tharbay , Dar Hammurabi lilynashri wa thouzeea
- Asaleeb Wa Thuruqu al-Thadrees al Hadeesa : Dr. Muhammed Assam Tharbaya; Dar Hammurabi lilynashri wa thouzeea
- Providing teachers effective strategies for using technology techrends: Brown B& Henscheid
- The systematic Design for Instruction: Dick, W& L(1990)

- Istheeratheejiiyath wa Maharah al Tharees :Kamal al Jundi; Dar al Jumhooriya lilthibaa
- Wasaail al Ithisal wa thaknologia fithaaleem :Dr Abd al hafiz muhammed salama ,Dar al Fjkar
- Al thadrees wa Iadad al Muallim: Dr.S Abdulrahman qindeel Dar al Nashr al Duwali
- Murshid al Muallim: Richard D. C ; Aalam al Kutub al Qahira
- Al Thadrees Ahdafuhu wa usasuhu wa Asaleebuhu Thaqweemu Nathaijuhu wa Thathbeeqathuhu: Dr Fikri Hasan Rayan, Aalm al kutub , al qahira
- Madkhal Ila Tharbiya al muthamayzeena wal Mauhoobeen, Dar al fikar lial thibaa wa Nashr
- Kuthub al Mudariseen lil madaris al thanawiyya: Majli al wilaya lilbuhuzu 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 Mudarisee al Lugha Al Arabiyya: Abid Thoufeeq al Hashmi; Al Risala publishing House, Bairoot
- National Curriculum Frame work 2005 , NCERT , New Delhi
- Teaching Strategies: A guide to better instructions, HMCo. New York
- Research in Education; Best J W, & Kahn J.V, prentice hall India Pvt Ltd.

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

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

### Objectives:

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

- Develop an understanding of techno- pedagogy and its principles
- Familiarize with the ways and importance of networking for professional and institutional growth
- Develop the ability and acquires the teaching skills by practicing complex skills of classroom teaching
- Develop the skill of enhancing web based resources in teaching
- Familiarize with basic concept of models of teaching and apply in class room teaching
- Acquire the ability to design lesson templates based on selected Models of teaching
- Familiarize with the global trends and developments in pedagogic practices of Arabic language Education

### Contents

**UNIT I :** TPCK AND SELF INSTUCTIONAL STRATEGIES  
**UNIT II :** NETWORKING IN ARABIC LANGUAGE LEARNING  
**UNITIII :** MODELS OF TEACHING IN PRACTICE  
**UNITIV :** GLOBAL TRENDS IN ARABIC LANGUAGE EDUCATION

### MODULE: UNIT I: TPCK AND SELF INSTUCTIONAL STRATEGIES

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. Develop an understanding of Techno- pedagogic content knowledge Analysis 2. Develops the ability and acquires the teaching skills by practicing complex skills of classroom teaching	<ul style="list-style-type: none"> <li>• Techno Pedagogic Content Knowledge Analysis (TCPKA)</li> <li>• Inter relationship of Content Knowledge, Pedagogical Knowledge &amp; Technological Knowledge</li> <li>• Scope and challenges of TPCKA in Arabic language Teaching</li> <li>• Teacher as a Techno Pedagogue</li> </ul>	Introductory Lecture  Discussion  Group Discussion  Observation	<ul style="list-style-type: none"> <li>• CE</li> <li>• Report</li> <li>• Workshop- products</li> <li>• TE</li> </ul>

	<ul style="list-style-type: none"> <li>• Knowledge generation/ production</li> <li>• Use of web based resources of TPCK</li> <li>• TPCK based content Analysis of selected units of TB of Secondary schools</li> <li>• Programmed Instruction and Self instructional modules</li> </ul>	Narration	
--	---	-----------	--

### UNIT II: NETWORKING IN ARABIC LANGUAGE LEARNING

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. Familiarize with the ways and importance of networking for professional and individual growth	<ul style="list-style-type: none"> <li>• Networking in Teaching and learning</li> <li>• Networking for professional growth</li> <li>• Professional communities : E-twinning for institutional &amp; professional growth</li> <li>• Forming forum of online learning:</li> <li>• Emails, blogs, teacher tube, for promoting teaching and learning of Arabic</li> <li>• Learning Management System – MOODLE</li> </ul>	Introductory Lecture Discussion Group Discussion Observation Narration	<ul style="list-style-type: none"> <li>• CE</li> <li>• Observation</li> <li>• Online- Assignments</li> <li>• TE</li> </ul>

### UNITIII: MODELS OF TEACHING IN PRACTICE

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. Familiarize with basic concept of models of teaching ways of employing it teaching 2. Acquire the ability to design lesson templates based of selected models	<ul style="list-style-type: none"> <li>• Models of Teaching:</li> <li>• Basic Concepts and Properties:</li> <li>• Syntax, Social System, support system, principles of reaction ,Instructional &amp; nurturant effects</li> </ul>	Introductory Lecture Discussion	<ul style="list-style-type: none"> <li>• CE</li> <li>• Assignments</li> <li>• Discussion report</li> <li>• TE</li> </ul>

and apply in classroom teaching	<ul style="list-style-type: none"> <li>• Designs based on selected models of teaching:</li> <li>• Concept Attainment Model, Advance Organizer Model , Synatics Model</li> </ul>	Group Discussion Observation Narration	
---------------------------------	---	--	--

#### UNITIV: GLOBAL TRENDS IN ARABIC LANGUAGE EDUCATION

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. Familiarizes with the global trends and developments in pedagogic practices of Arabic language education	<ul style="list-style-type: none"> <li>• Position of Arabic Language in the Modern World</li> <li>• Arabic language education in Kerala</li> <li>• Pedagogic practices of Arabic Language in speaking / non speaking countries</li> <li>• Critical Analysis of teaching and learning of Arabic Language in Kerala</li> </ul>	Introductory Lecture Discussion Group Discussion Observation Narration	<ul style="list-style-type: none"> <li>• CE</li> <li>• Discussion</li> <li>• Seminar reports</li> <li>• TE</li> </ul>

#### References:

- Models of Teaching: Bruce Joyce & Marsha weil
- Thareeqathu Thadreesi Wa strateejjiyathuhu: Dr Muhammed Mahmmud al Haila, Dar Al Kitab Al Jamia, Al ain, UAE
- Al Mawajjah Al Fanni Li Mudarirsee al Lughal Al Arabiyya: Abdul Aleem Ibrahim; Dar al maarif, Al qahira
- Thaaaleem al lugha al Arabiya lighairi al nathiqeena biha : Makthab al tharbiyya al Arabi liduwal al Khaleej
- Thuruqu thadrees al lugha al Arabiyya lil madaris al muthawassitha wa thanaiyya : Hasan Mulla Uthman ; Dar alam al Kuthub lithbaa wa nnashshr wa thouzeea, Riyadh, KSA
- Thaqnolojiya al Thaaaleem; Al wasail al thaaaleemiyya wa thaqniyyath al thaaluum: Dr. Muhammed Assam Tharbay , Dar Hammurabi lilynashri wa thouzeea
- Asaleeb Wa Thuruqu al-Thadrees al Hadeesa : Dr. Muhammed Assam Tharbaya; Dar Hammurabi lilynashri wa thouzeea

- Providing teachers effective strategies for using technology tech trends: Brown B& Henscheid
- Istheeratheejjiyyath wa Maharah al Tharees :Kamal al Jundi; Dar al Jumhooriya lilthibaa
- Wasaail al Ithisal wa thaknologia fithaaleem :Dr Abd al hafiz muhammed salama ,Dar al Fjkar
- Murshid al Muallim: Richard D. C ; Aalam al Kutub al Qahira
- Al Thadrees Ahdafuhu wa usasuhu wa Asaleebuhu Thaqweemu Nathaijuhu wa Thathbeeqathuhu: Dr Fikri Hasan Rayan, Aalm al kutub , al qahira
- Thaqniyyath al thaaleem( Mafhoomuha wa douruha fi thahseeni amaliyyath al thaaleem wa thaallum: Badar Salih
- Kithab al Muallim : Majlis al wilaya lilbuhuzu thabaviyya wathadreeb (SCERT)
- 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 Lugha Al Arabiyya: Abid Thoufeeq al Hashmi; Al Risala publishing House, Bairoot

## EDU- 09.6 : Curriculum and Resources in Digital Era: Tamil Education

(Theoretical Discourses – 60 & CE – 30 hours )

### Objectives:

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

### Contents

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

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

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. Familiarize student teacher with the principles of curriculum construction and organization 2. Grasp the relationship between curriculum and Syllabus	<ul style="list-style-type: none"> <li>• Principles of Curriculum construction and organization</li> <li>• NCF 2005, 2009, KCF 2007</li> <li>• Critical Pedagogy</li> <li>• Issue-based curriculum</li> <li>• Social constructivism</li> <li>• Curriculum and Syllabus, Curriculum-Types</li> <li>• Language Curriculum</li> </ul>	Direct instruction  Intro talk on the different Frame work available  Verbal interaction  Preparation of Check	<ul style="list-style-type: none"> <li>• Evaluation of entry made</li> <li>• in Reflective</li> <li>• Journal</li> </ul>



	<ul style="list-style-type: none"> <li>Philosophical and Sociological perspectives, Psychological and Linguistic Foundations</li> <li>Criteria for Selection of content</li> <li>Course book, Sourcebook</li> </ul>	list and group analysis of CB	
--	---	-------------------------------	--

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

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
1. Acquaint with teaching and learning resources available in formal and informal contexts	<ul style="list-style-type: none"> <li>Teaching and learning resources</li> <li>Formal &amp; Informal learning contexts</li> <li>Role of Language Institutes and Local Library for learning Tamil</li> <li>Society as Language Lab - Film</li> <li>Theatre</li> <li>Literary clubs, Language forums</li> <li>Interview and Talk by experts</li> <li>Exposure to events of national importance</li> <li>Inclusive Education- Concept, Need and significance; Ways of dealing with learners with LD/ Children with Special needs</li> </ul>	Field visit  Hands-on experience  Group discussion  Sharing of learning experience	<ul style="list-style-type: none"> <li>Surveying</li> <li>Checklist</li> <li>Presentation of Field visit reports</li> </ul>

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

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
1. To analyze instructional materials in print and digital form for effective transaction 2. To explore and practice infotainment activities in language	<ul style="list-style-type: none"> <li>Educational Websites</li> <li>Tamil Virtual University</li> <li>Virtual Classrooms</li> <li>Online language games- vocabulary, grammar, spelling etc.</li> </ul>	Presentation of specimen digital resources followed by critique on effectiveness	<ul style="list-style-type: none"> <li>Performance evaluation</li> <li>Participant observation</li> </ul>

	<ul style="list-style-type: none"> <li>• E-Library</li> <li>• E-resources for Prose</li> <li>• Film adaptations - literature and social issues</li> <li>• Audio podcasts</li> <li>• Speeches</li> <li>• E-resources for Poems</li> <li>• Critique of poems on websites</li> </ul> <p>Recitation</p>	<p>Individual /Pair work</p> <p>Exploring online resources and preparing report</p>	
--	---	---	--

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

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To enable student teachers to promote student effort in learning	<ul style="list-style-type: none"> <li>• Research in Tamil Language Education and Second Language Pedagogy</li> <li>• Identifying and locating significant concerns related to language learning</li> <li>• Action Research</li> <li>• Investigating any one learner issue</li> <li>• Review of Recent Research Studies in Tamil Language</li> <li>• Place of Tamil in Inter disciplinary studies</li> <li>• Current trends</li> </ul>	<p>Intro lecture</p> <p>Enquiry centred discussion</p> <p>Group tasks by assigning specific roles</p>	<ul style="list-style-type: none"> <li>• Style of presentation</li> <li>• Performance</li> <li>• Examine communicative competence</li> </ul>

## EDU -10.6 :Techno Pedagogic Content Knowledge Analysis : Tamil.

(Theoretical Discourses – 60 & CE – 30 hours)

### Objectives :

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

### Contents :

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

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

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. Familiarizes with the concept of teacher as Techno-pedagogue 2. Identifies the inter-relationship between Content Knowledge, Pedagogic Knowledge and Technological Knowledge	<ul style="list-style-type: none"> <li>• TCPK.</li> <li>• Techno-Pedagogy</li> <li>• Content Knowledge</li> <li>• Pedagogic Knowledge</li> <li>• Technology Knowledge</li> <li>• Teacher as a Techno-Pedagogue</li> <li>• Nature and scope of Self instructional Strategies</li> <li>• Programmed Instruction - Linear- Branching</li> <li>• Self Instructional modules</li> <li>• Computer Assisted Instruction(CAI)</li> <li>• Computer Based Instruction (CBI)</li> </ul>	Comparison of same content available in different digital formats  Group task to identify effectiveness of different digital content in realizing proposed learning objectives.  Demonstration of	<ul style="list-style-type: none"> <li>• Preparation of computer-based instructional material</li> </ul>

	<ul style="list-style-type: none"> <li>• Computer Assisted Language Learning (CALL)</li> </ul>	<p>teaching content with computer as aid and exclusively using computer</p> <p>Pair and group work to prepare computer-based instructional materials</p>	
--	--	--	--

**Unit II: Networking in language learning ( 20 hours )**

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
1. Familiarizes with ways of exploiting Internet resources for both knowledge enrichment and instruction 2. Develops necessary skills for transmission of information and content using websites	<ul style="list-style-type: none"> <li>• Networking:-Teacher –Teacher; Teacher-Institution; Teacher-Student</li> <li>• Forum-Wiki- Blog-Video Conferencing</li> <li>• Professional communities -Tamil Teacher Blogs-Teacher Tube -TSL -LinkedIn</li> <li>• Content writing-Copy Writing- Outsourcing-Transcription</li> </ul>	Introductory talk Demo in Smart Classroom Pair-share Collaborative tasks	<ul style="list-style-type: none"> <li>• Group presentation</li> <li>• Monitoring of activities in virtual world</li> <li>• Checking Popularity on Web</li> </ul>

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

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
1. Familiarizes with Models of Teaching as an instructional design and identifies ways of employing them for teaching Prose, Poetry, Vocabulary and Grammar	<ul style="list-style-type: none"> <li>• Dimensions of a Model- Syntax, Social System, Principles of Reaction, Support System Instructional and nurturing effects</li> <li>• Direct Instruction Model</li> <li>• Concept Attainment Model</li> <li>• Advance Organizer Model</li> <li>• Synectics Model</li> </ul>	Distribution of Specimen Lessons based on specific Models Group tasks for preparing lessons based on specific	<ul style="list-style-type: none"> <li>• Ability to transact the content/ realize objectives in the plans prepared</li> <li>• Checking effectiveness of Lesson Plans based on specific Models for chosen content</li> </ul>

	<ul style="list-style-type: none"> <li>• Role Play Model</li> </ul>	Models	
		Assimilation and accommodation	

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

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
1. Familiarizes with global trends in Language education 2. Familiarizes with aspects related to translation 3. Gets an awareness of digital resources for Online tutoring	<ul style="list-style-type: none"> <li>• Advanced Trends in Tamil Language Education</li> <li>• Exercises and pedagogic practices in Tamil language</li> <li>• Literary Translation as an exercise- poetry, fiction, prose, world classics from India, translation from English Literature, critical essays etc.</li> <li>• Journal Clubs – Review and discussion of studies and articles in Journals</li> <li>• Advanced Production of digital resources for Online tutoring</li> </ul>	Lecture-cum-discussion on different pedagogical practices.  Close reading of literary texts followed by group translation  Comparison of articles in journals and magazines to identify form and style required for journal articles followed by critique of articles written by peers  Critique of specimen digital resources followed by design and preparation of digital resources for Online tutoring	<ul style="list-style-type: none"> <li>• Prepares samples</li> <li>• Peer evaluation</li> <li>• Performance in tests</li> </ul>

## EDU – 09.7 : CURRICULUM AND RESOURCES IN THE DIGITAL ERA: MATHEMATICS EDUCATION

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

### Objectives:

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

### Contents:

**Unit 1: Curriculum Designing in Mathematics Education**

**Unit 2: Community Based Teaching and Learning Resources in Mathematics**

**Unit 3: E- Resources in Teaching and Learning Mathematics**

**Unit 4: Research Trends in Mathematics Education**

### Unit I: Curriculum Designing in Mathematics Education (20 hours)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To understand curriculum and modern approaches in curriculum construction 2. To understand the modern trends in curriculum construction 3. To familiarise with the principles of Curriculum organisation, 4. To familiarise various curriculum study groups in India and abroad	<ul style="list-style-type: none"> <li>• Concept of Curriculum</li> <li>• New approaches to curriculum Construction</li> <li>• Critical Pedagogy,</li> <li>• Problem Based Learning,</li> <li>• Constructivist Learning</li> <li>• Reflective learning</li> <li>• Experiential learning</li> <li>• Modern trends in curriculum construction</li> <li>• objective based</li> <li>• child centred</li> <li>• correlation</li> </ul>	Meaningful verbal expression Buzz session PBL Peer instruction Seminar Web Streaming Blog reading	<ul style="list-style-type: none"> <li>• Performance analysis in group</li> <li>• discussions</li> <li>• Observation</li> <li>• Seminar reports</li> <li>• Participation in the Seminar sessions</li> <li>• Assessment of daily reflections /Assignment</li> </ul>

	<ul style="list-style-type: none"> <li>• help for higher education</li> <li>• Reflect as a unified discipline, flexible, practicable etc</li> <li>• Principles of Curriculum organisation –</li> <li>• Topical and Spiral,</li> <li>• Logical and Psychological,</li> <li>• Correlation_</li> <li>• Curriculum Study Groups - SMP SMSG, NMP, NCERT and SCERT</li> </ul>		
--	---	--	--

**Unit II: COMMUNITY BASED TEACHING AND LEARNING RESOURCES IN MATHEMATICS(15 hours)**

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
1. To make the student teachers understand the need and importance of community based resources in the present scenario 2. To understand the man made resources in the present context 3. To make familiarise with informal learning contexts	<ul style="list-style-type: none"> <li>• Concept of community based resources</li> <li>• Human resources</li> <li>• Natural resources- Mathematical aspects found in Environmental phenomena (congruence, similarity, ratio and proportion, geometric shapes, symmetry etc.)</li> <li>• Man made resources</li> <li>• Mathematics laboratory</li> <li>• Mathematics library</li> <li>• Mathematics Club</li> <li>• * Informal learning contexts such as Mathematics exhibitions, Fair, Field Trip etc.</li> </ul>	Group discussions  Meaningful verbal Presentation  Power point presentations  Assignments  Seminar  Field trip  Community resource mobilization / Contextual analysis	<ul style="list-style-type: none"> <li>• Performance analysis in group discussions</li> <li>• Observation</li> <li>• Seminar reports</li> <li>• Participation in the Seminar</li> </ul>

**Unit III: E- RESOURCES IN TEACHING AND LEARNING MATHEMATICS (15 hours)**

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
1. To familiarise with the role of modern technology in the teaching and learning of Mathematics	<ul style="list-style-type: none"> <li>• <b>Digital resources</b>-CD, DVD, Websites, digital text books</li> <li>• Learning management systems- definition and Significance</li> <li>• Identification of E-resources(Web 2.0 tools: - Hot</li> <li>• Potatoes, Teacher Tube, Edublog,</li> <li>• m-learning-Nature and scope</li> <li>• Online Resources</li> </ul>	PowerPoint Presentations  Extension talks  On line learning  Web Streaming  Explicit teaching  Peer instruction	<ul style="list-style-type: none"> <li>• Documentation</li> <li>• Assessment of individual performance</li> <li>• Think Aloud Sessions</li> </ul>

**Unit IV: RESEARCH TRENDS IN MATHEMATICS EDUCATION (10 hours)**

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
1. To understand the need and importance of research in Mathematics education 2. To familiarise the different types of research 3. To identify major thrust areas of research in Mathematics Education	<ul style="list-style-type: none"> <li>• Research in Mathematics Education- Need and importance</li> <li>• Types of Research</li> <li>• Qualitative &amp; Quantitative</li> <li>• Historical, Fundamental and Action Research</li> <li>• Thrust areas of researches in mathematics education</li> </ul>	Net surfing  Blog reading  Action research  Invited lectures	<ul style="list-style-type: none"> <li>• Blog posting</li> <li>• Project report</li> <li>• Documentation</li> </ul>

**References :**

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



- Ediger, M. & Rao, D. B. (2000). *Teaching Mathematics Successfully*. New Delhi: Discovery Publishing House.
- James, A.(2005). *Teaching of Mathematics*. New Delhi: Neelkamal Publications,Pvt. Ltd.
- James, A. (2006). *Techniques of Teaching Mathematics*. New Delhi: Neelkamal Publications Pvt. Ltd.
- Joyce, B., Weil, M. & Calhoun, E. (2009). *Models of Teaching ( 8th ed.)*.New Delhi: PHI Learning Private Limited.
- Kulshreshtha, A. K. (2008). *Teaching of Mathematics*. Meerut: R.Lall Books Depot.
- Kumar,S.& Ratnalikar,D.N.(2003). *Teaching of Mathematics*. New Delhi: Anmol Publications Pvt. Ltd.
- Mangal, S.K. *Teaching of Mathematics*. Ludhiana: Prakash Brothers Educational Publishers.
- Mustafa, M.(2005). *Teaching of Mathematics*. New Delhi: Deep and Deep Publications Pvt. Ltd.
- Orton, A. (2007). *Learning Mathematics.(3rd ed.)*. London: Continuum
- Siddiqui, H.S. & Khan, M.S. (2004). *Models of Teaching - Theory and Research*. New Delhi: Ashish Publishing House.
- Siddiqui, M. H. (2007). *Teaching of Mathematics*. New Delhi: APH Publishing Corporation.
- Wadhwa, S. (2000). *Modern Methods of Teaching Mathematics*. New Delhi: Sarup & Sons.
- Rao, D.B. & Pushpalatha, D.(1995). *Achievement in Mathematics*. New Delhi: Discovery Publishing House.
- Soman, K. *Ganitha sashtra bodhanam*.Thiruvananthapuram: Kerala Bhasha Institute.

## EDU – 10.7 :TECHNO- PEDAGOGIC CONTENT KNOWLEDGE ANALYSIS: MATHEMATICS.

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

### Objectives:

- To undertake a self-empowerment initiative in transacting the Mathematics curriculum from a Techno-Pedagogical Content Knowledge perspective
- To get acquainted with different aspects of collaborative use of information communication technology
- To gain a perspective of basic theories and guiding plans for effective transaction of Mathematics.
- To understand the nature and importance of Mathematics from a global perspective

### Contents:

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

**Unit 2: Networking in Mathematics Learning**

**Unit 3: Models of Teaching in Practice**

**Unit 4: Global Trends in Mathematics Education**

### Unit 1: Techno-Pedagogic Content Knowledge and Self Instructional Strategies(15 hours)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
<ol style="list-style-type: none"> <li>1. To acquaint with the concept, meaning and scope of techno-pedagogic Content knowledge</li> <li>2. To understand the role of the teacher as a techno- pedagogue</li> <li>3. To enable the student teacher to generate and transact TPCCK based content analysis of Secondary school text books and CD resources</li> <li>4. To help students to practice self-instructional strategies</li> </ol>	<ul style="list-style-type: none"> <li>• Techno-Pedagogy:</li> <li>• Techno-pedagogue-Concept, meaning and scope</li> <li>• Role of teacher as a techno-pedagogue</li> <li>• Concept of TPCCK</li> <li>• Interrelationship of Content knowledge, pedagogic knowledge and technological knowledge</li> <li>• Scope and challenges of TPCCK</li> <li>• Generation and transaction of TPCCK based content analysis of secondary school text books and CD sources</li> <li>• Self Instructional Strategies</li> </ul>	<p>Group discussions</p> <p>Seminars</p> <p>Meaningful verbal presentation</p> <p>Power point presentations</p> <p>Illustrations</p>	<ul style="list-style-type: none"> <li>• Summative evaluation</li> <li>• Performance analysis in group discussions</li> <li>• Observation</li> <li>• Participation in the Seminar</li> <li>• Sessions</li> <li>• Examples cited in their lecture notedramatisation</li> </ul>

	Programmed Instruction (Linear, branching) Modular Instruction and CMI	Online assignment  Using the possibilities of blogs in networking  Video clippings	
--	---	--	--

**Unit II: Networking in Mathematics Learning (15 hours)**

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
1. To familiarise the student teachers with net working as a means of personal and professional growth of teachers 2. To provide hands on experience in online learning	<ul style="list-style-type: none"> <li>• Networking in learning Mathematics</li> <li>• Networking - Meaning and scope</li> <li>• Concept of E-twinning for institutional/professional growth</li> <li>• Creation of personal e-mail ID and BLOGS with a minimum of 5 posts for promoting the teaching and learning of Mathematics</li> </ul>	Demonstrations  Illustrations  Video clippings  Debating  Web based illustrations  Power point presentations	<ul style="list-style-type: none"> <li>• Document analysis</li> <li>• Student reports</li> <li>• Digital document analysis</li> <li>• Blog posting</li> <li>• <b>(Practicals)</b></li> <li>• <b>Creation of blog and posting</b></li> </ul>

### Unit III: Models of Teaching in Practice (20 hours)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To understand models of teaching 2. To understand the application of major psychological theories	<ul style="list-style-type: none"> <li>• <b>Models of teaching-</b> meaning and Concept</li> <li>• Components of a teaching model</li> <li>• Families of teaching models</li> <li>• Detailed study and practice on Concept</li> <li>• Attainment Model , Inquiry Training Model,</li> <li>• Constructivist Model, Discovery Model.</li> </ul>	Meaningful verbal expression Group discussion Peer tutoring Observation Brain storming Video analysis	<ul style="list-style-type: none"> <li>• Performance analysis in group discussion</li> <li>• Class test</li> <li>• Observation assessment lesson templates using Models of Teaching</li> <li>• (Discussion, Demonstration &amp; criticism lessons)</li> </ul>

### Unit IV: Global Trends in Mathematics Education (10 hours)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To compare mathematics education across the world 2. To identify recent projects in teaching of Mathematics in India	<ul style="list-style-type: none"> <li>• Comparison of Mathematics Education in World Wide</li> <li>• Mathematics teaching in developed countries-Japan, USA and UK</li> <li>• *Mathematics teaching in developing countries-, India, Pakistan Srilanka</li> <li>• Recent projects in Mathematics teaching in India- IT@school, OFSET, GURU.</li> </ul>	Web streaming Documentation Invited lectures Seminar	<ul style="list-style-type: none"> <li>• Document analysis</li> <li>• Blog posting</li> </ul>

#### References :

- Aggarwal, J.C. (2001). *Principles, Methods & Techniques of Teaching (2nd ed.)*. New Delhi: Vikas Publishing House Pvt. Ltd.
- Bode, H. B. (1927). *Modern educational theories*. New York: Macmillan.
- Ediger, M. & Rao, D. B. (2000). *Teaching Mathematics Successfully*. New Delhi: Discovery Publishing House.
- Good, C.V. ( Ed.), *Dictionary of Education, McGraw-Hill, New York, 1959.*

- James, A.(2005). *Teaching of Mathematics*. New Delhi: Neelkamal Publications,Pvt. Ltd.
- James, A. (2006). *Techniques of Teaching Mathematics*. New Delhi: Neelkamal Publications Pvt. Ltd.
- Joyce, B., Weil, M. & Calhoun, E. (2009). *Models of Teaching ( 8th ed.)*.New Delhi: PHI Learning Private Limited.
- Kulshreshtha, A. K. (2008). *Teaching of Mathematics*. Meerut: R.Lall Books Depot.
- Mustafa, M.(2005). *Teaching of Mathematics*. New Delhi: Deep and Deep Publications Pvt. Ltd.
- Orton, A. (2007).*Learning Mathematics.(3rd ed.)*. London: Continuum
- Siddiqui, H.S. & Khan, M.S. (2004). *Models of Teaching - Theory and Research*. New Delhi: Ashish Publishing House.
- Siddiqui, M. H. (2007). *Teaching of Mathematics*. New Delhi: APH Publishing Corporation.
- Rao, D.B. & Pushpalatha, D.(1995). *Achievement in Mathematics*. New Delhi: Discovery Publishing House.
- Mangal, S.K. *Teaching of Mathematics*. Ludhiana: Prakash Brothers Educational Publishers.
- Kumar,S.& Ratnalikar,D.N.(2003). *Teaching of Mathematics*. New Delhi: Anmol Publications Pvt. Ltd.
- Soman, K. *Ganitha sashtra bodhanam*.Thiruvananthapuram: Kerala Bhasha Institute.
- Wadhwa, S. (2000). *Modern Methods of Teaching Mathematics*. New Delhi: Sarup & Sons.

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

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

### Objectives:

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

### Contents:

**Unit 1: Curriculum Designing in Physical Science Education**

**Unit 2: Community Based Teaching and Learning of Physical Science**

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

**Unit 4: Research inputs in Physical Science Education**

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

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
<ol style="list-style-type: none"> <li>1. To acquaint with the concepts of curriculum and syllabus</li> <li>2. To understand and apply the principles of curriculum construction</li> <li>3. To familiarize with the curriculum organization</li> <li>4. To familiarize with the recent trends in curriculum construction in state, national and international level</li> <li>5. To understand correlation of Physical Science within the subject as well as with other subjects.</li> </ol>	<ul style="list-style-type: none"> <li>• Curriculum and syllabus-Meaning.</li> <li>• Hidden curriculum.</li> <li>• Principles of curriculum construction.</li> <li>• Types of curriculum-subject centred, activity centred, core curriculum,</li> <li>• Approaches to curriculum organisation- Concentric approach, Spiral approach, Type study, Topical approach, Historical approach, Nature study, Nature rambling, General science and disciplinary approach</li> <li>• Critical analysis of secondary school curriculum in Physical Science prescribed by SCERT.</li> <li>• Trends in curriculum construction-SCERT</li> </ul>	<p>Meaningful verbal expression</p> <p>Buzz session</p> <p>PBL</p> <p>Peer instruction</p> <p>Seminar</p> <p>Web Streaming</p> <p>Blog reading</p>	<ul style="list-style-type: none"> <li>• Questioning</li> <li>• Role performance analysis in Buzz discussion</li> <li>• Concept mapping</li> <li>• Open book analysis</li> </ul>

	<p>and NCERT curriculum, Critical Pedagogy, Issue based curriculum, Problem Based Learning- Main features.</p> <ul style="list-style-type: none"> <li>• Science-A Process Approach (SAPA), Cognitive Acceleration Through Science Education (CASE) / 'Let's Think through Science'</li> <li>• Correlation- Incidental and systematic, Correlation within the subject, Correlation of Physical science with other subjects such as biology, mathematics, language, geography, history, earth science, music, art and craft, life and environment</li> </ul>		
--	--	--	--

**Unit 2: Community Based Teaching and Learning of Physical Science (20+10=30 hours)**

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
<ol style="list-style-type: none"> <li>1. To acquaint with the concept and significance of community based resources</li> <li>2. To familiarize various formal and informal learning contexts</li> <li>3. To identify the contributions of human resources in local community</li> <li>4. To identify governmental and non-governmental movements for popularizing science</li> </ol>	<ul style="list-style-type: none"> <li>• Community based resources- Meaning , need and significance</li> <li>• Formal science learning contexts</li> <li>• Science library-importance and organisation, web resources</li> <li>• Science laboratory- Importance and organisation, Registers, Rules, Accidents and First aid</li> <li>• Field trips and excursions- Need and importance</li> <li>• Science fairs and exhibition-Significance, organisation and evaluation</li> <li>• Science club-Significance, organisation and activities</li> <li>• Informal learning contexts:</li> <li>• Science Park , museum, historical</li> </ul>	<p>Narrative expression sessions in small or medium groups</p> <p>Assignment</p> <p>Seminar</p> <p>Field trip</p> <p>Community resource mobilization / Contextual analysis</p>	<ul style="list-style-type: none"> <li>• Performance analysis</li> <li>• Quiz programme</li> <li>• K-W-L charting</li> <li>• Profile presentation</li> <li>• Blog posting</li> </ul>

	monuments, play grounds, music room, planetarium, ANERT, <ul style="list-style-type: none"> <li>• Human resources-Scientists and eminent personalities in local community</li> <li>• Governmental and non-governmental movements and organisations for popularising science-Science Talent Search Programme, Science Olympiad, KVPY, Sasthraposhini scheme</li> </ul>		
--	---	--	--

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

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
1. To identify various digital resources in learning of Physical Science 2. To understand the significance of Learning Management System 3. To familiarize various e-resources 4. To understand nature and scope of m-learning 5. To identify the challenges and means of rescue a teacher should possess in this digital era	<ul style="list-style-type: none"> <li>• Digital resources-CD, DVD, Websites</li> <li>• Learning Management System (LMS)- definition and significance.</li> <li>• Identification of E-resources:</li> <li>• Web 2.0 tools: - Hot Potatoes, Ptadle (Dynamic periodic table), Go!animate, Jing, Edmodo, Teacher Tube, Edjudo, Edublog, Chem Collective</li> <li>• E-learning-Nature and scope</li> <li>• Today's teacher – a digital migrant – challenges and means of rescue</li> </ul>	Web Streaming  Explicit teaching  Peer instruction	<ul style="list-style-type: none"> <li>• Documentation</li> <li>• Assessment of individual performance</li> <li>• Think Aloud Sessions</li> </ul>



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

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To understand the concept and scope of research inputs in science education 2. To identify the role of science teacher as a researcher 3. To identify major thrust areas of research in Physical Science	<ul style="list-style-type: none"> <li>• Research inputs - meaning and scope</li> <li>• Science teacher as a researcher</li> <li>• Thrust areas of research in Physical Science</li> </ul>	Net surfing  Blog reading  Action research  Invited lectures	<ul style="list-style-type: none"> <li>• Blog posting</li> <li>• Project report</li> <li>• Documentation</li> </ul>

**Reference**

- Bunnie Othanel Smith (1950): Fundamentals of Curriculum Development: California, World Book Company.
- David Heywood, Joan parker (2010): The Pedagogy of Physical Science: London, Springer.
- Dimitris Psillos& Hans Niedderer (2002): Teaching and Learning in the Science Laboratory: Netherlands, Kluwer Academic Publishers.
- Funda Ornek, Issa M. Saleh (Eds.) (2012): Contemporary Science Teaching Approaches: Promoting Conceptual Understanding in Science: USA, Information Age Publishing Group.
- Jeffrey Michael Reyes, Duncan Andrade, Ernest Morrell (2008): The Art of Critical Pedagogy: Possibilities for Moving from Theory to Practice: New York, Peterlang Publishing Inc.
- John Wallace, William Louden (2002): Dilemmas of Science Teaching [electronic resource]: perspectives on problems of practice: New York, Routledge.
- Mariamma Mathew (2014): Teaching science for biological and physical sciences: NAS Publishers: Kerala
- NCSECA (1995):National Science Education Standards USA ,National Academic Press.
- Radha Mohan(2007): Innovative Science Teaching: New Delhi, Prentice Hall of India Pvt Ltd.

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

(Theoretical Discourses - 60 hrs, CE - 30 hours)

### Objectives:

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

### Contents:

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

**Unit 2:** Networking in Physical Science Learning

**Unit 3:** Models of Teaching in Practice

**Unit 4:** Global Trends in Physical Science Education

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

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
<ol style="list-style-type: none"> <li>1. To conceptualize the basic principles of Techno-Pedagogic Content Knowledge Analysis in Physical Science Teaching and Learning</li> <li>2. To identify the role of science teacher as a techno-pedagogue</li> <li>3. To understand various Self Instructional Strategies</li> </ol>	<ul style="list-style-type: none"> <li>• Techno-Pedagogic Content Knowledge Paradigm-Interrelationship of Content Knowledge, Pedagogic Knowledge and Technological Knowledge,</li> <li>• TPCK based content analysis of selected units of the secondary readers in Physical Science.</li> <li>• Science teacher as a techno-pedagogue.</li> <li>• Techno-pedagogic competencies,</li> <li>• Self Instructional Strategies- Meaning, Types- Programmed Instruction (Linear, branching), Modular Instruction, Personalized System of Instruction, CAI and CMI</li> </ul>	<ul style="list-style-type: none"> <li>Small group discussion</li> <li>Documentation</li> <li>Web searching</li> <li>Self-study</li> <li>Power Point Presentations</li> <li>Seminar</li> <li>Didactic Questioning</li> </ul>	<ul style="list-style-type: none"> <li>• Participant observation</li> <li>• Document analysis</li> <li>• On-task behaviour in class</li> <li>• Reflective journal</li> </ul>

### Unit 2: Networking in Physical Science Learning (14 +10 = 24 hrs)

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
1. To understand the role and purposes of networking in learning physical science 2. To acquaint with the concept of e-twinning.	<ul style="list-style-type: none"> <li>• Networking - Meaning and scope</li> <li>• Networking in learning of Physical Science- Purposes Types- Technical, Personal and Institutional</li> <li>• e-twinning for institutional or professional growth in learning of Physical Science</li> </ul>	Net surfing Blog reading Invited lectures Digital Modular Expositions	<ul style="list-style-type: none"> <li>• Digital document analysis</li> <li>• Blog posting</li> <li>• Debate</li> <li>• Online test</li> </ul>

**Unit 3: Models of Teaching in Practice (25 +20 = 45 hrs)**

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
1. To understand the application of major psychological theories 2. To familiarize with various thinking skills 3. To understand models of teaching	<ul style="list-style-type: none"> <li>• Psychological theories for learning science- Piaget, Bruner, Gagne, Vygotsky and Ausubel, Gardener's Multiple Intelligence Theory</li> <li>• Thinking skills - critical thinking, creative thinking, reflective thinking</li> <li>• Models of teaching-Concept Attainment Model, Inquiry Training Model, Advance Organiser Model, Constructivist and 5E model</li> </ul>	Meaningful verbal expression Group discussion Peer tutoring Observation Brain storming Video analysis	<ul style="list-style-type: none"> <li>• Analysis in group discussion</li> <li>• Class test</li> </ul>

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

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To compare science education across the world 2. To identify recent projects in science teaching in India	<ul style="list-style-type: none"> <li>• Comparative Science Education World Wide-Science teaching in developed countries-Australia, Canada-Science teaching in developing countries-Indonesia, Srilanka</li> <li>• Recent projects in science teaching in India-it@school, OFSET, GURU</li> </ul>	Web streaming  Documentation  Invited lectures	<ul style="list-style-type: none"> <li>• Document analysis</li> <li>• Blog posting</li> </ul>

**Reference:**

- AACTE Committee (2008): Handbook of Technological Pedagogical Content Knowledge (TPCK) for Educators: Washington, DC, Rutledge/Taylor & Francis
- Bhattacharya S.P. (1994): Models of Teaching: New Delhi, Regency Publications.
- Bruce R. Joyce, Marsha Weil and Emily Calhoun (2011): Models of Teaching (7th Ed.): USA, Pearson Education
- Frank Rennie & Tara Morrison (2013): E-Learning and Social Networking Handbook (Second Edition): New York, Routledge.
- Frank Rennie, Tara Morrison (2013): e-Learning and Social Networking Handbook: Resources for Higher Education: New York, Taylor & Francis.
- Janie Gross Stein, Richard Stein (Ed.) (2001): Network of Knowledge: Collaborative Innovation in International Learning: Toronto, Canada, University of Toronto Press Incorporated
- Mangal S.K. & Uma Mangal (2009): Essentials of Educational Technology: New Delhi, PHI Learning Pvt Ltd.
- Mariamma Mathew (2014): Teaching science for biological and physical sciences: NAS Publishers: Kerala

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

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

**OBJECTIVES :** To enable the student teachers to:

- Understand the different types of resources for teaching Natural Science.
- Locate different reference materials related with Biological Science.
- Identify the school and community resources for better Biological Science learning.
- Familiarize and understand the natural resources, man-made resources in teaching Natural Science.
- Familiarize the different club activities related with Natural Science.
- Understand the steps of organizing field trip, excursion, science fair & exhibition.
- Understand the different approaches of organizing Biological Science curriculum.
- Familiarize the modern trends in curriculum movements in India and abroad.
- Familiarize and understand the e-learning resources for teaching Natural Science.
- Identify research inputs in genetic engineering, medical field & environmental issues.

**CONTENTS :**

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

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

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To understand different types of resources. 2. To understand the relevance & scope of different types of resources. 3. To understand, and utilize school based resources in formal and informal learning.	<ul style="list-style-type: none"> <li>• 1.1 Different types of resources.</li> <li>• 1.2 Relevance &amp; scope of different types of resources.</li> <li>• 1.3 School based Resources For Science Learning.</li> <li>• 1.3.1 Library –School and Class library-importance and its organization, Types of resources for accessing information- book,</li> </ul>	Group discussion Seminar PBL Multimedia and interdisciplinary approach.	<ul style="list-style-type: none"> <li>• Quiz programme.</li> <li>• Participation in group discussion.</li> <li>• Questioning.</li> <li>• On-task behavior</li> <li>• Field trip report.</li> <li>• Assignments</li> <li>• Seminar presentation.</li> </ul>

<p>4. To develop skill in designing a high school biology laboratory.</p> <p>5. To organize different extra-curricular activities related to science teaching.</p> <p>6. To identify, and utilize different community resources for science learning.</p>	<p>non book and web resources.</p> <ul style="list-style-type: none"> <li>• 1.3.2 Science laboratory- significance and organization –Designing a high school biology laboratory.</li> <li>• 1.3.4 Club activities - Science club, Science fair, Exhibition, Manuscript magazine, Field trip &amp; Excursion, Community awareness programme and Living corners- Pisciculture, different types of garden(Vegetable, ornamental and Herbal).</li> <li>• 1.3.5Text books- qualities of good science text book, Text book analysis. Supplementary reader.</li> <li>• 1.3.6 Hand book for teachers and Work book for learner.</li> <li>• 1.3.7 Reference material-encyclopedia, newsletters, magazines, journals.</li> <li>• 1.4 Community Based Resources For effective Science Learning</li> <li>• 1.4.1 Community resources for science learning- relevance and scope.</li> <li>• 1.4.2 Identification of Community resources for better science teaching and learning.</li> <li>• 1.4.3 Human resources- e.g. Resource persons/ eminent teachers/ personalities/ scientists in the local community.</li> <li>• 1.4.4 Natural Resources- e.g. .pond /lake/river/sea/ forest/ wet land/ sacred grooves etc.</li> <li>• 1.1.5 Man made Resources- e.g. Museum/ Zoo/ Botanical garden/ Agrifarms / hospital, Krishi Vignjan Kendrum /Research centers under State &amp; Central government.</li> </ul>	<p>Team teaching.</p> <p>Peer tutoring.</p> <p>Meaningful verbal expression.</p> <p>Organizing &amp; designing science library, science laboratory.</p>	
---	--	---	--

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

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
<ol style="list-style-type: none"> <li>1. To understand the Meaning-functions and Principles of curriculum construction.</li> <li>2. To familiarize different types of curriculum.</li> <li>3. To understand and apply the principles of curriculum construction.</li> <li>4. To understand and compare the curricular movements in national and international level.</li> <li>5. To understand the types of correlation in the teaching learning process.</li> <li>6. To understand the importance of correlation in the teaching learning process.</li> <li>7. To make a Critical analysis of the prevailing secondary school biology syllabus.</li> </ol>	<ul style="list-style-type: none"> <li>• 2.1 Curriculum-Meaning-functions and, Principles of curriculum construction,</li> <li>• Types of curriculum- subject centered, activity centered, integrated and hidden curriculum.</li> <li>• 2.2 Approaches to curriculum organization- Topical, Subject, Concentric, Spiral and Integrated/ Correlation approach (Incidental &amp; Systematic correlation).</li> <li>• 2.3 Factors affecting curriculum organization.</li> <li>• 2.4 Criteria of a good Natural science curriculum.</li> <li>• 2.5 Critical analysis of the prevailing secondary school biology syllabus.</li> <li>• 2.6 Curriculum reforms in India (NCERT) &amp; abroad (BSCS).</li> </ul>	<p>Meaningful verbal expression</p> <p>Group discussion</p> <p>Small group sessions</p> <p>Peer instruction</p> <p>Narrative expression sessions in small or medium groups.</p> <p>Brain storming.</p> <p>Seminar.</p> <p>PBL.</p> <p>Modular approach.</p> <p>Multimedia and interdisciplinary approach.</p> <p>Team teaching.</p> <p>Peer tutoring</p>	<ul style="list-style-type: none"> <li>• Participation in group discussion.</li> <li>• Questioning.</li> <li>• On-task behavior in class.</li> <li>• Tests.</li> <li>• Science diary.</li> <li>• Daily reflective journal.</li> <li>• Participant observation.</li> </ul>

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

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
<ol style="list-style-type: none"> <li>To understand and compare the Educational CDs developed by SIET, NCERT, IT@ school for the learning of biology at secondary level.</li> <li>To familiarize you tube resources related with HS Biology.</li> <li>To familiarize e-journals, e-books related with Biology.</li> <li>To understand about the use of e-resources.</li> <li>To develop a skill in using e-resources.</li> <li>To understand the meaning-relevance &amp; scope of virtual laboratory &amp; virtual dissection.</li> <li>To identify &amp; use virtual laboratory &amp; virtual dissection related with HS Biology.</li> </ol>	<ul style="list-style-type: none"> <li><b>3.1</b> An introduction to the contribution of e-learning materials developed by SIET, NCERT &amp; IT@ school for the learning of biology at secondary level.</li> <li><b>3.2</b> You tube resources related with HS Biology.</li> <li><b>3.3</b> An introduction to e-journals, e-books related with Biology</li> <li><b>3.4</b> An introduction to websites devoted for science teaching &amp; learning.</li> <li><b>3.5</b> Meaning-relevance &amp; scope of virtual laboratory &amp; virtual dissection.</li> </ul>	<p>Modular approach.</p> <p>Multimedia and inter disciplinary approach.</p> <p>Team teaching.</p> <p>Peer tutoring</p> <p>Meaningful verbal expression</p> <p>Group discussion</p> <p>Using internet effectively for collecting information.</p>	<ul style="list-style-type: none"> <li>Participation in group discussion.</li> <li>Questioning.</li> <li>On-task behavior</li> <li>Report of video analysis.</li> <li>Involvement in using e-journals, e-books related with Biology.</li> <li>Involvement in using virtual laboratory &amp; virtual dissection.</li> </ul>

**UNIT-IV AN INTRODUCTION TO RESEARCH INPUTS IN BIOLOGY(Theory hours-11, )**

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
<ol style="list-style-type: none"> <li>To understand research inputs in genetic engineering, medical sciences &amp; Environmental issues.</li> <li>To understand the emerging challenges related with organ</li> </ol>	<ul style="list-style-type: none"> <li><b>4.1</b> <b>Research inputs in genetic engineering</b> (Give brief introduction about Human Genome Project, Tissue culture).</li> <li><b>4.2</b> <b>Research inputs in medical</b></li> </ul>	<p>Multimedia and inter disciplinary approach.</p> <p>Team teaching.</p>	<ul style="list-style-type: none"> <li>Peer tutoring</li> <li>Meaningful verbal expression</li> <li>Group discussion</li> <li>Assignment</li> </ul>



<p>transplantation.</p> <ol style="list-style-type: none"> <li>3. To get an idea about the importance of family farming.</li> <li>4. To get an idea about the existing waste disposal measures in a scientific way.</li> <li>5. To suggest innovative measures to waste disposal.</li> </ol>	<p><b>sciences</b>(Meaning and scope of Organ transplantation- a new hope for life, Nano-technological applications in medical field)</p> <ul style="list-style-type: none"> <li>• <b>4.3Research inputs inEnvironmental issues</b> (Family farming, waste disposal).</li> </ul>	<p>Peer tutoring Meaningful verbal expression Group discussion Assignment Seminar</p>	<ul style="list-style-type: none"> <li>• Seminar presentation.</li> </ul>
--	--	---	---

### References

- Anderson R.D et al. (1992): Issues of Curriculum Reform in Science, Mathematics and Higher Order Thinking Across the Disciplines: U.S.A, The Curriculum Reform Project.
- Carin & Robert Sund (1989): Teaching Modern Science (5th Ed.): U.S.A, Merrill Publishing Co.
- Chauhan S. S. (1985): Innovation in Teaching and Learning Process: New Delhi, Vikas Publishing House.
- Davar Monika (2012): Teaching of Science: India, PHI Learning Pvt. Ltd.
- Edgar Dale (1963): Audio-Visual Methods in Teaching (Revised Ed.): New York, Thy Dryden Press.
- Falvery P., Holbrook J. & Conian D. (1994): Assessing Students: Hongkong, Longmans Publications.
- Gupta S.K. (1985): Teaching of Physical Science in Secondary Schools: New Delhi, Sterling Publications.
- Harms N. & Yager R. (1981): What Research Says to the Science Teacher (Vol. 3): USA, National Science Teachers Association.
- Heiss, Obourn & Hoffman (1985): Modern Science in Secondary Schools: New Delhi, Sterling Publications.
- Husen T., Keeves J.P. (Eds.) (1991): Issues in Science Education: Oxford, Pergamon Press.
- Jenkins E. W. (2000): Innovations in Science and Technology Education (Vol. VII): Paris, UNESCO.
- Kalra R.M. & Gupta Vandana (2012): Teaching of Science - A Modern Approach: India, PHI Learning Pvt. Ltd.
- Khana S. D., Sexena V.R., Lamba T.P. & Murthy V. (1976): Technology of Teaching: New Delhi, Doaba House.
- Mintzes Joel J., Wandersee James H. & Novak Joseph D. (Ed.) (2005): Teaching of Science for Understanding-A Human Constructivist View: California, Academic press, USA.
- Nair, C.P.S. (1971): Teaching of Science in our Schools: New Delhi, Sultan Chand & Co. (Pvt.) Limited.
- Natrajan C. (1997): Activity Based Foundation Course on Science Technology and Society: Mumbai, Homi Bhabha Centre for Science Education.
- Nayak (2003): Teaching of Physics: New Delhi, APH Publications.
- Pandey (2003): Major Issues in Science Teaching: New Delhi, Sumit Publications.
- Bunnie Othanel Smith (1950): Fundamentals of Curriculum Development: California, World Book Company.
- David Heywood, Joan parker (2010): The Pedagogy of Physical Science: London, Springer.

- Carl Simmons, Claire Hawkins, (2009). Teaching ICT-Developing as Reflective Secondary teacher, Sage South Asia education, New Delhi.
- Ramakrishna, (2012). Methodology of Teaching Life Sciences, Dorling Kindersley Pvt Ltd, India.
- Jessy Mathews, (2008). Teaching of Natural Science –theory, Perspectives and practices. Methodology of teaching life sciences
- Radha Mohan, (2007). Innovative Science Teaching for Physical Science teachers (3<sup>rd</sup> ed) PHL Learning, New Delhi.
- Narendera Vaidhya, (2006). Science Teaching in School for the 21<sup>st</sup> Century, Deep and Deep Publications Pvt, New Delhi.
- Mathew, T.K., and Molikutty, T.M, (2006). Science Education- Theoretical Base of Teaching and Pedagogic Analysis, Rainbow Book Publishers, Kerala.
- Dimitris Psillos & Hans Niedderer (2002): Teaching and Learning in the Science Laboratory: Netherlands, Kluwer Academic Publishers.
- Frederick M. Hess (2006): Educational Entrepreneurship: realities, challenges, possibilities: Harvard, Harvard Education Press.
- Funda Ornek, Issa M. Saleh (Eds.) (2012): Contemporary Science Teaching Approaches: Promoting Conceptual Understanding in Science: USA, Information Age Publishing Group.
- Jeffrey Michael Reyes, Duncan Andrade, Ernest Morrell (2008): The Art of Critical Pedagogy: Possibilities for Moving from Theory to Practice: New York, Peter Lang Publishing Inc.
- John Wallace, William Loudon (2002): Dilemmas of Science Teaching [electronic resource]: perspectives on problems of practice: New York, Routledge.
- NCSECA (1995): National Science Education Standards USA, National Academic Press.
- Radha Mohan (2007): Innovative Science Teaching: New Delhi, Prentice Hall of India Pvt Ltd.
- AACTE Committee (2008): Handbook of Technological Pedagogical Content Knowledge (TPCK) for Educators: Washington, DC, Routledge/Taylor & Francis
- Chao, Lee (ed.) (2012) Cloud Computing for Teaching and Learning: Strategies for Design and Implementation: Hershey, PA, IGI Global.

#### INTERNET REFERENCES

- <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.91....>
- [http://en.wikipedia.org/wiki/Technological\\_Pedagogical\\_Conte...](http://en.wikipedia.org/wiki/Technological_Pedagogical_Conte...)
- <http://www.amazon.com/books/dp/0805863567>
- <http://ictevangelist.com/technological-pedagogical-and-conte>
- How the web will change the classroom by Mohan, R., (2007).
- <https://d1jt5u2soh3gkt.clc>

## EDU – 10.9 : TECHNO-PEDAGOGIC CONTENT KNOWLEDGE ANALYSIS -NATURAL SCIENCE.

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

**OBJECTIVES :**To enable the student teacher to:

- develop Understanding And Application Of Techno-Pedagogic Content Knowledge Analysis
- develop Skill In Preparation And Practice Of Technology Enhanced Learning Materials.
- understand And Apply Online Assessment And Competency Enhancement Avenues.
- identify Net Working As A Means Of Personal And Professional Growth
- understand Classroom Management Principles Essential For Effective Pedagogic Transaction.
- get An Idea About Global Trends In Science Education.
- familiarize The Modern Trends In Science Education At Global Level.
- get An Idea About Self Instructional Strategies.
- understand About Self Instructional Strategies.

**CONTENTS :**

**Unit – I : Technological Pedagogical Analysis Of Content Knowledge (TPACK) .**

**Unit – II : Net working in Science Learning.**

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

**Unit – IV : Global trends in Natural science Education.**

### UNIT.I TECHNOLOGICAL PEDAGOGICAL ANALYSIS OF CONTENT KNOWLEDGE (TPACK)–A CONCEPTUAL ANALYSIS. (Hours-22)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To understand about the conceptual analysis of Technological Pedagogical Content Knowledge (TPCK) 2. To understand and find inter relationships of different areas of TPACK 3. To develop skill in Technological Pedagogical Analysis of Content	<ul style="list-style-type: none"> <li>• 1.1 Technological Pedagogical Analysis of Content Knowledge (TPACK)-meaning and scope. Different knowledge areas of TPACK-</li> <li>• Content Knowledge (CK),</li> <li>• Pedagogical Knowledge (PK),</li> <li>• Technology Knowledge (TK)</li> <li>• Pedagogical Content Knowledge (PCK),</li> <li>• Technological Content Knowledge (TCK),</li> <li>• Technological Pedagogical Knowledge</li> </ul>	Meaningful verbal expression. Group discussion. Narrative expression sessions in small or medium groups. Multimedia and interdisciplinary	<ul style="list-style-type: none"> <li>• Participation in group discussion.</li> <li>• Questioning.</li> <li>• On-task behavior in class.</li> <li>• Tests.</li> <li>• Science diary.</li> <li>• Daily reflective journal</li> <li>• Participant observation</li> <li>• Report of Technological Pedagogical Content</li> </ul>

Knowledge (TPACK) of Secondary School Biology.	(TPK), and <ul style="list-style-type: none"> <li>• Technological Pedagogical Content Knowledge (TPCK).</li> <li>• Interrelationships of different areas of TPACK</li> <li>• 1.2 Technological Pedagogical Content Knowledge Analysis of Secondary School Biology.</li> </ul>	approach. Team teaching. Peer tutoring	Knowledge Analysis of Secondary School Biology.
--	---	--	---

### UNIT-II NETWORKING IN SCIENCE LEARNING ( Hours-18)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
<ol style="list-style-type: none"> <li>1. To understand the meaning &amp; scope of networking in science teaching.</li> <li>2. To develop skill in Networking through different ways.</li> <li>3. To develop skill in the preparation and practice of ICT and Multimedia based materials in the teaching learning process of science</li> <li>4. To develop skill in the preparation and practice of online assessment tools in science teaching learning process.</li> <li>5. To understand different competitive examinations for teachers.</li> <li>6. To understand the Educational entrepreneurship - Career possibilities for trained graduate and post graduate science students</li> </ol>	<ul style="list-style-type: none"> <li>• <b>Networking</b>- meaning and scope of Net working in science learning.</li> <li>• <b>Development of one Blog</b> for Natural science class and 5 postings by each student for promoting teaching learning/social issues/challenges etc.</li> <li>• <b>e-twinning</b>- means for institutional and professional growth.</li> <li>• <b>2.4 ICT and Multimedia as technology enhanced communication devises in the teaching of life science</b>- Collection/ Preparation of e-materials for pedagogic transaction of secondary school biology syllabus including environmental issues affecting local community(Power points, video clippings, pictures, instructional materials )</li> <li>• <b>2.3 Online Assessment And Competency Enhancement avenues.</b></li> <li>• <b>2.3.1 Online assessment</b>- -meaning and scope, Down load an Online quiz maker and</li> </ul>	<p>Group discussion</p> <p>Seminar</p> <p>Personality profile presentation</p> <p>Reflective practices.</p> <p>PBL</p> <p>Multimedia and interdisciplinary approach.</p> <p>Team teaching.</p> <p>Peer tutoring</p> <p>Net working</p> <p>e-twinning</p> <p>Blog posting</p>	<ul style="list-style-type: none"> <li>• Online assessment</li> <li>• Quiz programme.</li> <li>• Participation in group discussion.</li> <li>• Questioning.</li> <li>• On-task behavior.</li> <li>• Student's portfolio.</li> <li>• Blog posting</li> <li>• Net working</li> <li>• e-twinning</li> <li>• Preparation of e-materials</li> <li>• Online Assessment</li> </ul>

	<p>use it during practice teaching.</p> <ul style="list-style-type: none"> <li>• <b>2.3.2 Competitive examinations for secondary school students</b> – Science Talent Search Scheme, Science Olympiad, Google science fair.</li> <li>• <b>2.3.3 Competitive Examinations for teachers</b> - KTET, NTET, TET.</li> <li>• <b>2.3.4 Educational entrepreneurship</b> - Career possibilities for trained graduate and post graduate science students.</li> </ul>		
--	--	--	--

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

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
<ol style="list-style-type: none"> <li>1. To understand the basic elements in the models of teaching</li> <li>2. To develop skill in selecting suitable models of teaching for transacting pedagogy.</li> <li>3. To develop and design lesson plans based on Concept Attainment Model(CAM), Inquiry Training Model(ITM), 5E Model of BSCS, Inductive Thinking Model &amp; Role play model.</li> <li>4. To develop skill in selecting suitable self-instructional strategies for transacting pedagogy.</li> <li>5. To understand about Computer Assisted Instruction (CAI). Its advantages &amp; disadvantages.</li> <li>6. To understand &amp; prepare Modules.</li> </ol>	<ul style="list-style-type: none"> <li>• <b>3.1 Models of teaching:</b> Introduction, Elements and Families of models of teaching.</li> <li>• <b>Concept Attainment Model(CAM),</b></li> <li>• <b>Inquiry Training Model(ITM),</b></li> <li>• <b>5E Model of BSCS,</b></li> <li>• <b>Inductive Thinking Model ,</b></li> <li>• <b>Role play model</b></li> <li>• <b>3.3 Self Instructional Strategies-</b> An overview about Self Instructional Strategies, advantages &amp; disadvantages.</li> <li>• <b>3.4 An introduction to Computer Assisted Instruction(CAI),</b> its advantages &amp; disadvantages.</li> <li>• <b>3.5 Modules,</b> its advantages &amp; disadvantages.</li> </ul>	<p>Meaningful verbal expression</p> <p>Group discussion</p> <p>Small group sessions</p> <p>Peer instruction</p> <p>Narrative expression sessions in small or medium groups.</p> <p>Brain storming.</p> <p>PBL.</p> <p>Modular approach.</p> <p>Multimedia and interdisciplinary approach.</p>	<ul style="list-style-type: none"> <li>• Participation in group discussion.</li> <li>• Questioning.</li> <li>• On-task behavior in class.</li> <li>• Tests.</li> <li>• Science diary.</li> <li>• Daily reflective journal</li> <li>• Lesson plans based on models of teaching.</li> <li>• Module preparation</li> </ul>

		Concept Attainment Model(CAM) Inquiry Training Model(ITM) 5E Model of BSCS Inductive Thinking Model Role play model.	
--	--	--	--

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

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
1. To familiarize & understand about the global trends in education.	<ul style="list-style-type: none"> <li>• <b>4.1</b>An introduction to global trends in education</li> <li>• <b>4.1.1</b>University &amp; career readiness</li> <li>• <b>4.1.2</b> Longitudinal perspectives</li> <li>• <b>4.1.3</b> Digital content</li> <li>• <b>4.1.4</b> Individualized learning</li> </ul>	Narrative expression sessions in small or medium groups. Meaningful verbal expression Multimedia approach Discussion	<ul style="list-style-type: none"> <li>• Participation in group discussion.</li> <li>• Questioning.</li> <li>• On-task behavior in class.</li> <li>• Tests.</li> <li>• Science dairy.</li> </ul>

**Referances**

- AACTE Committee (2008): Handbook of Technological Pedagogical Content Knowledge (TPCK) for Educators: Washington, DC, Rutledge/Taylor & Francis
- Chao, Lee (ed.) (2012) Cloud Computing for Teaching and Learning: Strategies for Design and Implementation: Hershey, PA, IGI Global.
- Joyce, Bruce, and Weil, Marsha,(1997). Models of Teaching (5<sup>th</sup>Edn.) New Delhi: Prentice Hall of India.
- Bybee, R., Taylor, J. A., Gardner, A., Van Scotter, P., Carlson, J., Westbrook, A., Landes, N. (2006). *The BSCS 5E Instructional Model: Origins and Effectiveness.*, Colorado Springs, CO: BSCS.
- Bybee, R.W., (2010), *The Teaching Science: 21st Century Perspectives*, Arlington V A: NSTA Press.

- Senan, Divya C., J.V, Asha., (2012), *Science Pedagogy through Constructivist Multimedia Learning Material: Design of a Strategy*, Germany, Lambert Academic Publishing.
- Bybee R.W., The BSCS 5E instructional model and 21st century skills. Paper prepared for the Workshop on Exploring the Intersection of Science Education and the Development of 21st Century Skills, National Research Council. 2009. Available:
- Radha Mohan , (2007). *Innovative Science Teaching for Physical Science teachers* (3<sup>rd</sup>ed) PHL learning, New Delhi
- Jessy Mathews, (2008). *Teaching of Natural Science –Theory, Perspectives and Practices, Methodology of Teaching Life Sciences.*
- Narendera Vaidhya, (2006). *Science Teaching in School for the 21<sup>st</sup> Century*, deep and deep publications PVT, New Delhi.
- Mujibul Hassan Siddiqui., (1991) *Models of Teaching*, Ashish publishing house, New Delhi.
- Senan, Divya C., J.V, Asha., (2012), *Science Pedagogy through Constructivist Multimedia Learning Material: Design of a Strategy*, Germany, Lambert Academic Publishing.
- Radha Mohan , (2007). *Innovative Science Teaching for Physical Science teachers* (3<sup>rd</sup>ed) PHL learning, New Delhi
- Jessy Mathews, (2008). *Teaching of Natural Science –Theory, Perspectives and Practices, Methodology of Teaching Life Sciences.*
- Narendera Vaidhya, (2006). *Science Teaching in School for the 21<sup>st</sup> Century*, deep and deep publications PVT, New Delhi.
- Mujibul Hassan Siddiqui., (1991) *Models of Teaching*, Ashish publishing house, New Delhi.
- Clark, R.C. and R.E. Mayer., (2002). *E.Learning and Science of instruction*, Pfeiffer, San Francisco.
- R.A. Sharma ., (2009). *Information and Communication Technology in Teaching*, Lall Book Depot, Meerat.
- Jahitha Begum, Natesan, G, Sampath, (2011). *ICT in Teaching Learning*, Balaji offset, Delhi.
- Krishna Sagar, (2005). *ITCs and Teacher Training*, Tarun offset, Delhi.
- Hussain M. (2012). *E.Learning*, Srikrishna offset Pvt, Delhi
- Anshulkaushik., (2007). *Computer security – insiders view to Network forensics*, Khana book publishing company, Delhi
- Carl Simmons, Claire Hawkins (2009). *Teaching ICT-Developing as a Reflective Secondary Teacher*, Sage South Asia education, New Delhi
- Chao, Lee (ed.) (2012) *Cloud Computing for Teaching and Learning: Strategies for Design and Implementation*: Hershey, PA, IGI Global.
- Frank Rennie & Tara Morrison (2013): *E-Learning and Social Networking Handbook* (Second Edition): New York, Routledge.
- Frank Rennie, Tara Morrison (2013): *e-Learning and Social Networking Handbook: Resources for Higher Education*: New York, Taylor & Francis
- Janie Gross Stein, Richard Stein (Ed.) (2001): *Network of Knowledge: Collaborative Innovation in International Learning*: Toronto, Canada, University of Toronto Press Incorporated
- Mangal S. K. & Uma Mangal (2009): *Essentials of Educational Technology*: New Delhi, PHI Learning Pvt Ltd.
- Rena M. Palloff & Keith Pratt (2009): *Assessing the Online Learner*: San Francisco, Jossey-Bass.
- Tony Ghaye (2011): *Teaching and Learning Through Reflective Practice* (Second Edition): New York, Routledge.

#### INTERNET REFERENCES

- <http://www7.nationalacademies.org/bose/21CentSKillUploads.html>
- [www.BuildingClassroomDiscipline.com](http://www.BuildingClassroomDiscipline.com)

- <http://www.theteachersatrisk.com/2010/07/18/most-popular-blog-about-classroom-management/>
- [http://www.theteachers\\_guide.com/ClassMagement.htm](http://www.theteachers_guide.com/ClassMagement.htm)
- <http://www7.nationalacademies.org/bose/21CentSKillUploads.html>
- [http://www.theteachersatrisk.com/2010/07/18/most popular blog about classroom management.](http://www.theteachersatrisk.com/2010/07/18/most_popular_blog_about_classroom_management.)
- <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.91...>
- [http://en.wikipedia.org/wiki/Technological\\_Pedagogical\\_Conte...](http://en.wikipedia.org/wiki/Technological_Pedagogical_Conte...)
- [http://www.amazon.com/\*\*books\*\*/dp/0805863567](http://www.amazon.com/books/dp/0805863567)
- [http://ictevangelist.com/\*\*technological-pedagogical\*\*-and-conte](http://ictevangelist.com/technological-pedagogical-and-conte)



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

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

### Objectives :

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

### Contents :

Unit 1	Curriculum Designing in Social Science Education
Unit 2	School and Community Based Instructional Resources in Teaching Social Science
Unit 3	E- Resources in Teaching and Learning of Social Science.
Unit 4	Research Trends in Social Science Education

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

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To get acquainted with modern principles and trends in the construction and organization of Social Science curriculum 2. To become conversant with NCF and KCF to develop approaches to Social Science Education	<ul style="list-style-type: none"> <li>• Curriculum – Concept, Principles of designing Social Science curriculum</li> <li>• Approaches, types of curriculum, Modern trends in designing Social Science curriculum.</li> <li>• Brief outline about NCF (2005) KCF (2007) and its approaches in Social science curriculum formation.</li> </ul>	Analytical approach  Seminar  Co-operative learning  Prepare a paper on NCF and KCF and its approaches to Social Science curriculum.	<ul style="list-style-type: none"> <li>• Seminar with slide presentation (CE- Edu. 09)</li> </ul>

## References

- <http://www.ncert.nic.in/html/pdf/schoolcurriculum/framework>
- [http://www.ssamis.com/web/downloads/KCF 2007.pdf](http://www.ssamis.com/web/downloads/KCF%2007.pdf)
- <http://www.case.edu/artsci/engl/emmons/writing/pedagogy>
- Rao, Bhaskara (2005) Curriculum for Learning to Live Together. New Delhi: Discovery Publishing House.
- Aggarwal, J.C. (1996) A Practical Approach. New Delhi : Vikas Publishing House Pvt. Ltd.
- Singh and Gopal (2004) Teaching Strategies. New Delhi: APH Publishing Corporation.
- Sue, Cowley (2006) A – Z of Teaching. New York: Brij basi Art Press Ltd.
- Aggarwal, J.C. (2003). *Teaching of Social Studies: A Practical Approach*. Mumbai:Vikas Publishing House.
- Kumar, S.P.K & Noushad,P.P.(2009). Social Studies in the Classroom: Trends andMethods.
- Pathak R.P.(2012).Teaching of social studies. Pearson, Delhi
- Ehman & Patrick (1974). Towards Effective Instruction in Social Studies. USA: Houghton Miffln.
- Dash, B. N.(1998). Content cum Methods of Teaching Social Studies. Ludhiana: KalyaniPublishers.
- Edigar, M. & Rao, B. (2003).Teaching Social Studies Successfully. New Delhi: Discovery Pub.House.
- NCF (2005) and KCF (2007)

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

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
<ul style="list-style-type: none"> <li>• To identify and to utilize community resources for the effective transaction of Social Science Curriculum</li> </ul>	<ul style="list-style-type: none"> <li>• Community Resources- meaning, nature, need and scope in Social Science.</li> <li>• School to community and community to school- The need and role of Social Science clubs in community related curricular programmes</li> <li>• Resources- Historical- Palace, museum, caves, forts, archives etc, Geographical- Planetorium, Mountains, seashore, rift valley etc, Political- Gramasabha, Panchayat, Legislative assembly, memorials etc, Economical- market, bank, stores etc.</li> </ul>	<p>Discussion</p> <p>Prepare a list of community recourses- discuss and present the ways to utilize the community recourses</p> <p>Visit to any one of the community resources.</p>	<ul style="list-style-type: none"> <li>• Field trip to any one site with action plan and report (<b>Practical Sem.2</b>)</li> </ul>

## References

- <http://cricap.org>
- <http://www.ehow.com/>
- Aggarwal, J.C. (1996) A Practical Approach. New Delhi : Vikas Publishing House Pvt. Ltd.
- Singh and Gopal (2004) Teaching Strategies. New Delhi: APH Publishing Corporation.
- Raj, Rani Bansal (1999). Models of teaching and concepts of learning. New Delhi: Anmol Publications.
- Aggarwal, J.C. (2003). *Teaching of Social Studies: A Practical Approach*. Mumbai:Vikas Publishing House.
- Kumar, S.P.K & Noushad,P.P.(2009). Social Studies in the Classroom: Trends and Methods.
- Pathak R.P.(2012).Teaching of social studies. Pearson, Delhi
- Ehman & Patrick (1974). Towards Effective Instruction in Social Studies. USA: Houghton Miffln.
- Dash, B. N.(1998). Content cum Methods of Teaching Social Studies. Ludhiana: Kalyani Publishers.
- Edigar, M. & Rao, B. (2003).Teaching Social Studies Successfully. New Delhi: Discovery Pub.House. <http://en.wikipedia.org/wiki/Wiki>

### Unit 3: e- Resources in Teaching and Learning of Social Science

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To generate a broad perspectives of e-resources in instructional practices 2. To develop skill in retrieving and transacting Social Science curriculum through e-resources	<ul style="list-style-type: none"> <li>• Concept of e- resources, Web resources, social networking, Educational blogs, e-journals, e-learning, m- learning, web based learning.</li> <li>• Learning Management System (LMS) in the teaching- learning of Social science.</li> <li>• IT enabled instructional resources: On line resources, videos, YouTube resources, animations, film clippings.</li> </ul>	Online learning  Web search  Blogging and submission of online assignment	<ul style="list-style-type: none"> <li>• Use e-resources to prepare any 4 learning materials</li> <li>• <b>Test for units 1,2 &amp; 3 (CE-Edu. 09)</b></li> </ul>

## Reference

- <http://www.bbk.ac.uk/linkinglondon/resources/>
- [http://en.wikipedia.org/wiki/Learn\\_management\\_system](http://en.wikipedia.org/wiki/Learn_management_system)<https://www.itschool.gov.in>
- [www.youtube.com/user/itsvicters](http://www.youtube.com/user/itsvicters)
- [en.wikipedia.org/wiki/IT@School\\_Project](http://en.wikipedia.org/wiki/IT@School_Project)

- [victers.itschool.gov.in/](http://victers.itschool.gov.in/)
- [www.youtube.com/user/itsvicters](http://www.youtube.com/user/itsvicters)
- Alexey Semenov, UNESCO, (2005): Information and Communication Technologies in Schools: A Handbook for Teachers.
- Atkins N.J and Atkins J.N, Practical Guide to Audio Visual Technique in Education,
- Battacharjee Shymali, (2007). Media and Mass communication. An introduction. New Delhi: Kanishka Publishers.
- Hoole H.S. Ratnajeewan & Hoole Dushyanthi. (2005). Information and communication technology. New Delhi: Foundation Books PVT. LTD.
- Khan, BoH (1977) Web-based Instruction. Englewood Cliffs: Educational Technology Publications.
- Madhukumar Indira. (2005). Internet based distance learning . New Delhi: Global Network.
- Mayer Richard E(2001); Multimedia Learning, Cambridge University Press, UK. McDonald &Evans Ltd. 1975
- Prasad Janardan, (2007). Audio Visual education. Teaching innovative technique. New Delhi: Kanishka Publishers.
- Rejeseakaran S. (2007) Computer Education and Educational Computing, New Delhi: Neel Kamal Publishing Pvt. Ltd.
- Roblyer, M.D. (2008). Integrating educational technology into teaching. New Delhi: Pearson.
- Sagar Krishna, (2005). ICT Teacher training. New Delhi : Global Network
- Kumar, S.P.K & Noushad,P.P.(2009). Social Studies in the Classroom: Trends and Methods.
- <http://blog.efrontlearning.net>
- <http://www.e-learningforkids.org/courses.html>
- <http://www.teacher.ne>

#### Unit 4 Research Trends in Social Science Education

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To develop a positive attitude towards research in the curriculum development process and to utilize the research findings in the teaching learning process.	<ul style="list-style-type: none"> <li>• An introduction to Research in Social science Education- Need and importance</li> <li>• Teacher as a researcher in Social science</li> <li>• Analysis of Research outcomes in the teaching and learning of Social Science education.</li> </ul>	<p>Group Discussion</p> <p>Prepare a paper (utilizing internet) on the latest research findings on pedagogical aspects in Social science education and conduct a seminar.</p>	<ul style="list-style-type: none"> <li>• Observe the participation of student teachers in the learning process</li> </ul>

## Reference

- <http://www.edu.plymouth.ac.uk/resined/actionresearch/arhome.htm>
- Best, John.W & Kahn, James.V. (1999). *Research in Education*. Boston: Allyn and Bacon.
- Leary, Zina O((2010). *Doing your research project*. New Delhi. SAGE
- Aggarwal, J.C. (2003). *Teaching of Social Studies: A Practical Approach*. Mumbai: Vikas Publishing House.
- Kumar, S.P.K & Noushad,P.P.(2009). *Social Studies in the Classroom: Trends and Methods*.
- Pathak R.P.(2012).*Teaching of social studies*. Pearson, Delhi
- Dhand, H. (1991). *Research in Teaching Social Studies*. New delhi: Ashish Publishing House
- Crowder, N.A. (1959). *Action Research to Improve School Practices*. New York: Columbia University.
- <http://en.wikipedia.org/wiki/Wiki>
- [www.moodle.org](http://www.moodle.org)
- <http://www.ncert.nic.in>
- <http://www.ciet.nic.in/>

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

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

### Objectives

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

### Contents :

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

Unit 2 Networking in Social Science Learning

Unit 3 Models of Teaching in Social Science.

Unit 4 Global Trends in Social Science Education

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

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
<ol style="list-style-type: none"> <li>1. To conscientize the prospective teachers become a techno-pedagogue</li> <li>2. To become aware of the concept TPCK</li> <li>3. To become capable of analyzing content based on technology</li> <li>4. To get aware on self instructional strategies.</li> </ol>	<ul style="list-style-type: none"> <li>• Inter relationship between Technology, Pedagogy and Content.</li> <li>• Teacher as Techno-Pedagogue in Social Science</li> <li>• Scope and purpose of Techno-Pedagogic Content Knowledge Analysis.</li> <li>• Self Instructional Strategies: Importance</li> <li>• Programmed instruction</li> <li>• CAI and CMI</li> <li>• Instructional modules</li> </ul>	<p>Meaningful verbal learning</p> <p>On line learning</p> <p>Group discussion</p> <p>TPCK based content analysis (Selected units of secondary/ higher secondary text books)</p>	<ul style="list-style-type: none"> <li>• Prepare a self explanatory note on 'Teacher as a Techno-Pedagogue'</li> <li>• TPCK based Content analysis on any one unit.</li> <li>• Video script developing &amp; recording &amp; uploading</li> <li>• ( CE- Edu.10)</li> </ul>

## References

- [http://en.wikipedia.org/wiki/Technological\\_Pedagogical\\_Content](http://en.wikipedia.org/wiki/Technological_Pedagogical_Content)
- Refernces:
- Alexey Semenov, UNESCO, (2005): Information and Communication Technologies in Schools: A Handbook for Teachers.
- Atkins N.J and Atkins J.N, Practical Guide to Audio Visual Technique in Education,
- Battacharjee Shymali, (2007). Media and Mass communication. An introduction. New Delhi: Kanishka Publishers.
- Hoole H.S. Ratnajeewan & Hoole Dushyanthi. (2005). Information and communication technology. New Delhi: Foundation Books PVT. LTD.
- Khan, BoH (1977) Web-based Instruction. Englewood Cliffs: Educational Technology Publications.
- Madhukumar Indira. (2005). Internet based distance learning . New Delhi: Global Network.
- Mayer Richard E(2001); Multimedia Learning, Cambridge University Press, UK. McDonald &Evans Ltd. 1975
- Social Science text book of standard 8,9 & 10 of Kerala
- Teachers' Hand book in Social Science for standard 8,9 &10
- Varma, O. P. & Vedanayagam, E. G. (1993). Geography Teaching. N. Delhi: Sterling.
- Cornwell, R. D. (1985). World History in the Twentieth Century. England: Longman.
- Joshi, P. S., Gholkar S.V. (1983). History of Modern India. N. Delhi: S.Chand & Company Ltd.
- Kaur, Dhian & Chandana, R. C. (ed.) (2006). The Earth: Ludhiana: Kalyani Publishers.
- Singh R. L., Singh, Rana, P. B. (2002). Elements of Practical Geography. N. Delhi: Kalyan Publishers.

## Unit 2 Networking in Social Science Learning

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To grow to be competitive in designing digital texts and e-content in Social science. 2. To become empower in surfing digital resource for transacting Social science curriculum.	<ul style="list-style-type: none"> <li>• Professional and Institutional growth: Through network-twinning</li> <li>• Student and Institution Networking</li> <li>• Online learning: Concept and system of online learning, virtual learning.</li> <li>• Creation of e-mail ID and blogs</li> <li>• Applications of Social Networking systems</li> </ul>	Discussion  Online learning  Demonstration  Workshop	<ul style="list-style-type: none"> <li>• Observation</li> <li>• Report verification</li> </ul>

## Reference

- <http://teachinghistory.org/issues-and-research/roundtable>
- [www.5learn.co/e-content-development](http://www.5learn.co/e-content-development)
- [www.aptaracorp.com/digital-content-production/econtent-development](http://www.aptaracorp.com/digital-content-production/econtent-development)
- [www.ntu.edu.sg/home/sfoo/publications/2002/02ecdl\\_fmt.pdf](http://www.ntu.edu.sg/home/sfoo/publications/2002/02ecdl_fmt.pdf)
- [www.net-security.org](http://www.net-security.org)
- [blog.ebayclassifieds.com](http://blog.ebayclassifieds.com)
- [cybercoyote.org/security/safe-web.html](http://cybercoyote.org/security/safe-web.html)
- Alexey Semenov, UNESCO, (2005): Information and Communication Technologies in Schools: A Handbook for Teachers.
- Atkins N.J and Atkins J.N, Practical Guide to Audio Visual Technique in Education,
- Battacharjee Shymali, (2007). Media and Mass communication. An introduction. New Delhi: Kanishka Publishers.
- Hoole H.S. Ratnajeewan & Hoole Dushyanthi. (2005). Information and communication technology. New Delhi: Foundation Books PVT. LTD.
- Khan, BoH (1977) Web-based Instruction. Englewood Cliffs: Educational Technology Publications.
- Madhukumar Indira. (2005). Internet based distance learning . New Delhi: Global Network.
- Mayer Richard E(2001); Multimedia Learning, Cambridge University Press, UK. McDonald &Evans Ltd. 1975

### Unit 3 Models of Teaching

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To acquaint with the concept, families and selected items of Models of Teaching 2. To acquaint with practice of developing lesson transcripts based on selected Models of Teaching.	<ul style="list-style-type: none"> <li>• Models of teaching – Introduction, Operational Heart, Different families</li> <li>• Concept Attainment Model with lesson transcripts</li> <li>• Advance Organizer Model with lesson transcripts</li> <li>• Group Investigation Model with lesson transcripts.</li> <li>• Jurisprudential model &amp; Inquiry Training Model</li> </ul>	Scaffolding strategies  Demonstration  Simulation  Online learning	<ul style="list-style-type: none"> <li>• Discussion lesson-5(ICT-1, activity based-1, Models-3)</li> <li>• Demonstration- 2 (Models)</li> <li>• Criticism (5)</li> <li>• <b>(Practicals – sem-2)</b></li> </ul>



## References

- <http://www.guardian.co.uk/higher-education-network/>
- Kumar, S.P.K & Noushad,P.P.(2009). *Social Studies in the Classroom: Trends and Methods*.
- Joyce,B& Weil, M. (2003). *Models of Teaching* (5th Ed.) New Delhi: Prentice Hall Aggarwal, J.C. (2003). *Teaching of Social Studies: A Practical Approach*.

### Unit 4 Global Trends in Social Science Education

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To help the prospective teachers for comparative study of social science education in a global perspective.	<ul style="list-style-type: none"><li>• Global trends in Social Science education</li><li>• Social Science education in other states and other Nations.</li><li>• Comparison of Social Science curriculum, textbook and transactional modalities with other countries.</li></ul>	Discussion – Web searching.  Seminar- compare SS curriculum & Text books of SCERT, NCERT and any one advanced nations.	<ul style="list-style-type: none"><li>• Assignment &amp; seminar report</li></ul>

## References

- [http://en.wikipedia.org/wiki/Reflective\\_practice](http://en.wikipedia.org/wiki/Reflective_practice)
- <http://tep.uoregon.edu/showcase/crmodel/strategies>
- Borich, Gary D (2012). *Effective teaching methods: Research based practice*. New Delhi: Pearson Education
- Social Science text book of standard 8,9 & 10 of Kerala
- Teachers' Hand book in Social Science for standard 8,9&10 -- NCERT Text Books.

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

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

### Objectives :

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

### CONTENTS :

- Unit 1 : Curriculum Designing in Geography Education  
 Unit 2 : School and Community Based instructional Resources in Teaching Geography  
 Unit 3 : e- Resources in Teaching and Learning of Geography  
 Unit 4 : Research Trends in Geography Education

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

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To get acquainted with concepts, principles and modern trends in the construction and organisation of Geography Curriculum 2. To become conversant with NCF and KCF to develop approaches to Geography Education	<ul style="list-style-type: none"> <li>• Importance and place of Geography in the curriculum</li> <li>• Curriculum – concepts determinants, patterns types, principles and modern trends</li> <li>• Curriculum organisational approaches – spiral /concentric/ topical</li> <li>• An outline of trends, patterns and approaches as suggested in NCF (2005) and KCF (2007) in Geography curriculum formation</li> <li>• Critical analysis of existing HS/HSS Geography curriculum</li> </ul>	Analytical approach  Debate  Seminar  Co-operative learning  Web Search  Lecture cum discussion	<ul style="list-style-type: none"> <li>• Assessment of learning process and reflections</li> <li>• Prepare a brief sketch of NCF and KCF on Geography curriculum</li> <li>• Seminars</li> <li>• Assignments</li> </ul>

		Prepare reports on NCF/ KCF	
--	--	-----------------------------	--

### Reference

- <http://www.ncert.nic.in/html/pdf/schoolcurriculum/framework>
- [http://www.ssamis.com/web/downloads/KCF 2007.pdf](http://www.ssamis.com/web/downloads/KCF%202007.pdf)
- <http://www.case.edu/artsci/engl/emmons/writing/pedagogy>
- Rao, Bhaskara (2005) Curriculum for Learning to Live Together New Delhi: Discover, Publishing House
- Singh and Gopal (2004) Teaching Strategies. New Delhi: APH Publishing corporation
- Sue, Cowley (2006) A-Z of Teaching. New York: Brijji basi Art Press Ltd.
- Verma O.P, and Vedanayagam. E.G (1987) Teaching of Geography, Sterling Publishers Private Limited, New Delhi
- Arora M.L (1979) Teaching of Geography, Prakash Brothers, Ludhiane

### Unit 2: School and Community Based Instructional Resources in Teaching Geography ( 18 Hrs + 8 Hrs)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To identify and to utilize community resources for the effective transaction of Geography curriculum 2. To develop an understanding about the significance of Geography room, library, club, museum, excursion and field visits	<ul style="list-style-type: none"> <li>• Community resources- meaning nature need significance and methods of utilization</li> <li>• Natural and man- made resources in Geography</li> <li>• Relationship between school and community- bringing them together</li> <li>• Features significance and way of organizing</li> <li>• Geography room, library, club, museum</li> <li>• Exhibition hairs</li> <li>• Exhibitions/ Fairs</li> <li>• Excursion /field visits</li> </ul>	Lecture cum discussion Meaningful Verbal learning Online learning Visit to any one of the community resource centres Planetarium Archaeological sites CESS, IMD, SOI, Land USE/ Soil	<ul style="list-style-type: none"> <li>• Field visit /study report</li> <li>• Assignments on utilisation of community resources in teaching- learning of Geography</li> </ul>

		Survey Departments etc  Prepare a list of community resources  Discuss and present the ways to utilize the community resources	
--	--	---	--

### Reference

- <http://wikipedia.Wikipedia.Org/wiki/wiki>
- <http://cricap.org>
- <http://www.ehow.com>
- Singh and Gopal (2004) Teaching Strategies. New Delhi: APt Publishing Corporation
- Raj, Rani Bansal ( 1999) Models of teaching and concepts of learning. New Delhi: Anmol Publications
- AroraM.L (1979) Teaching of Geography, Prakash Brothers, Ludhiane
- Gopill G.H (1966) Teaching of Geography, Macmillan, London
- VermaO.P, and Vedanayagam. E.G (1987) Teaching of Geography, Sterling Publishers Private Limited, New Delhi

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

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To generate a broad perspective of e- resources in Geography instructional practices 2. To develop skill in- retrieving and transacting Geography curriculum through e- resources 3. To identify the use of ICT in the teaching- learning of Geography	<ul style="list-style-type: none"> <li>• Concept and importance of e- resources, web resources, social networking, Blogs, e-learning, m- learning and web- based learning in Geography</li> <li>• Learning Management systems (LMS virtual library</li> <li>• Virtual library</li> <li>• Application of IT enables instructional resources in Geography online resources, Internet resources video conferencing etc</li> </ul>	Online learning  Demonstration  Narrative expression Web search Internet access Blogging and submission of online assignments	<ul style="list-style-type: none"> <li>• Use of 4 e-resource to prepare for learning materials</li> <li>• Internal test for units, 1, 2 and 3 CE-I, EDU-09</li> </ul>

## Reference

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

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

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To develop a positive attitude towards research in the curriculum development process and to utilize the research findings in the teaching learning of Geography	<ul style="list-style-type: none"> <li>• Need and significance of research in teaching – learning of Geography</li> <li>• Need for developing innovative techniques and strategies in pedagogy and evaluation in Geography</li> <li>• Teacher as a researcher in geography</li> <li>• Action research in Geography need and significance</li> </ul>	<p>Group discussion</p> <p>Online learning</p> <p>Group discussion</p> <p>Prepare a paper on research in pedagogical aspects</p> <p>Conduct seminar</p>	<ul style="list-style-type: none"> <li>• Online assignment (Practical evaluation)</li> <li>• Assignment preparation</li> <li>• Reflections</li> </ul>

## Reference

- <http://en.Wikipedia.org/wiki/wiki>
- [http://www.edn.playmonth.ac.uk/resined/action\\_research/arhome.htm](http://www.edn.playmonth.ac.uk/resined/action_research/arhome.htm)
- Best, John W. and Kahn, James V. (1999) *Research in Education*. Boston: Allyn and Bacon
- Leary/ Zina O. (2010) *Doing Your Research Report* New Delhi: SAGE Publications
- Crowder N.A (1959) *Action Research to Improve School Practices*. New York: Columbia
- Alan Holmeister & Margaret Lake (1990) *Research into Practice USA*: Allyn & Bacon
- Arora M.L (1979) *Teaching of Geography*, Prakash Brothers, Ludhiana
- Gopill G.H (1966) *Teaching of Geography*, Macmillan, London
- Verma O.P, and Vedanayagam. E.G (1987) *Teaching of Geography*, Sterling Publishers Private Limited, New Delhi
- [www.Moodle.org](http://www.Moodle.org)
- <http://www.cet.nic.in/>
- <http://www.ncert.nic.in>

## EDU - 10.11 : Techno Pedagogic Content Knowledge Analysis – Geography

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

### Objectives

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

### Contents :

Unit 1 Techno- Pedagogic content Knowledge Analysis (TPCK) and self- Instructional Strategies

Unit 2 Net working in Geography Learning

Unit 3 Models of Teaching in Geography

Unit 4 Global Trends in Geography Education

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

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To conscientize the prospective teachers become a techno pedagogue 2. To become aware of the concept of TPCK 3. To become capable of analysing contents based on technology 4. To get an awareness on self – instructional strategies	<ul style="list-style-type: none"> <li>• TPCK- concept, scope, challenges</li> <li>• Inter- relationship with content, pedagogic and technological knowledge</li> <li>• Technological knowledge required for a Geography teachers</li> <li>• Self- instructional strategies Need &amp; Importance CAI &amp; Modular approach</li> </ul>	Meaningful verbal learning  On-line learning  Group discussion  TPCK based content analysis  Internet access	<ul style="list-style-type: none"> <li>• Preparing notes</li> <li>• Analysing content based on TPCK</li> <li>• Assignments</li> <li>• Video script developing and uploading</li> </ul>

## Reference

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

### Unit 2 Networking in Geography Education (12 Hrs + 6 Hrs)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To be aware of designing digital texts and e-content in Geography 2. To familiarise with networking system for institutional & Professional growth	<ul style="list-style-type: none"> <li>• Institutional networking and professional growth</li> <li>• Current high-tech classroom techniques</li> <li>• Creation of email ID/Blogs</li> <li>• Concept of on-line learning and virtual learning</li> <li>• E- twinning</li> </ul>	Discussion Online learning Demonstration Internet access Workshop	<ul style="list-style-type: none"> <li>• Observation</li> <li>• Report verification</li> <li>• Internal test for units 1 and 2 (EC- EDU.10)</li> <li>• ICT based lesson and uploading as practical works</li> <li>• Internal test for units 1 &amp; 2 (CE- EDU.10)</li> </ul>

## Reference

- [http://teachinghistory.org/issues-and-research/round table](http://teachinghistory.org/issues-and-research/round-table)
- [www.apara.com/digital-content-problem/e-content development](http://www.apara.com/digital-content-problem/e-content-development)
- [www.net.security .org](http://www.net.security.org)
- [cybercoyote.org/security/sage-web.html](http://cybercoyote.org/security/sage-web.html)
- [http://en.wikipedia.org/wiki/Technological Pedagogical content](http://en.wikipedia.org/wiki/Technological_Pedagogical_content)



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

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

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To acquaint with the concept, families and selected items of models of teaching 2. To acquaint with developing lesson transcripts based on selected models of teaching	<ul style="list-style-type: none"> <li>• Models of teaching- definition, concept, significance, essential elements</li> <li>• Families of models of teaching</li> <li>• Ausubel's meaningful verbal learning</li> <li>• Advance organiser, Inquiry training, Jurisprudential and role playing models</li> </ul>	Demonstration Online learning Simulation Scaffolding strategies Lesson transcript preparation Web search	<ul style="list-style-type: none"> <li>• Discussion lesson</li> <li>• Demonstration lesson</li> <li>• Criticism</li> <li>• (Any 3 lessons on models of teaching)</li> <li>• Practical</li> <li>• Assignments</li> </ul>

#### Reference

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

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

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To help the prospective teachers for comparative study of Geography education in a global perspective 2. To be aware the techniques of education for children with special needs	<ul style="list-style-type: none"> <li>• Geography Education global trends in the 21<sup>st</sup> century in the developed and developing countries in south –East Asia</li> <li>• Quantitative revolution in Geography</li> <li>• Geography education for children with special needs gifted/ slow learners/culturally-deprived- nature, characteristics and activities</li> </ul>	Discussion Web searching Seminars Internet access NCERT Text books Online learning	<ul style="list-style-type: none"> <li>• Seminars</li> <li>• Reporting</li> <li>• Assignment</li> </ul>

**Reference**

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

## EDU - 09.12 : CURRICULUM AND RESOURCES IN DIGITAL ERA: COMMERCE EDUCATION

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

### Objectives

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

### Contents:

- Unit 1** Curriculum Designing in Commerce Education  
**Unit 2** School and Community Based Instructional Resources in Teaching Commerce  
**Unit 3** E- Resources in Teaching and Learning of Commerce  
**Unit 4** Research Trends in Commerce Education

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

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To get acquainted with modern principles in the construction and designing of commerce curriculum 2. To become conversant with NCF and KCF	<ul style="list-style-type: none"> <li>• Curriculum – Concept, Principles of designing commerce curriculum</li> <li>• Approaches, types of curriculum, Modern trends in designing commerce curriculum.</li> <li>• Brief outline about NCF (2005) KCF (2007) and its relevance in vocational education.</li> </ul>	Analytical approach  Debate  Seminar  Co-operative learning	<ul style="list-style-type: none"> <li>• Group investigation summary reports</li> <li>• Prepare a brief sketch of NCF and KCF</li> </ul>

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

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
1. To develop a desire to take active involvement in community affairs 2. To become systematically correlate instructional practices with life of the community; thereby develop better public relations.	<ul style="list-style-type: none"> <li>• School and community based teaching – learning resources: school to the community and community to the school.</li> <li>• Co-curricular activities-school bank, commerce club, commerce library, commerce laboratory, commerce room etc.</li> </ul>	Discussion  Project method  Visit to commercial institutions/ industries	<ul style="list-style-type: none"> <li>• Prepare a list of community recourses- discuss and present the ways to utilize the community recourses</li> <li>• Conduct a field study to any one of the resource centers.</li> </ul>

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

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
1. To generate a broad perspectives of e-resources in instructional practices 2. To develop skill in retrieving and transacting commerce curriculum through e-resources	<ul style="list-style-type: none"> <li>• Concept of e- resources, Web resources, social networking, Educational blogs, e-journals, pod casting, e-learning, m- learning, web based learning.</li> <li>• Learning management system (LMS) in teaching learning of commerce education.</li> <li>• IT enabled instructional resources: On line resources, videos, YouTube resources, animations, film clippings.</li> </ul>	Online learning  Demonstration  Narrative expression  Web search	<ul style="list-style-type: none"> <li>• Use any e-resources to prepare any 4 learning materials</li> </ul>

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

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To develop a positive attitude towards research 2. To develop inquiry skills and scientific investigation	<ul style="list-style-type: none"> <li>• An introduction to Research in Commerce Education- Need and importance</li> <li>• Commerce Teacher as a researcher</li> <li>• Analysis of Research outcomes in Commerce education both teaching and learning.</li> </ul>	Group Discussion  Brain storming  Education Journal analysis	<ul style="list-style-type: none"> <li>• Prepare a paper (utilizing internet) on the latest research findings on pedagogical aspects in Commerce and conduct a seminar.</li> </ul>

#### References

- Aggarwal, J.C. (1996) A Practical Approach. New Delhi : Vikas Publishing House Pvt. Ltd.
- Best, John.W & Kahn, James.V. (1999). *Research in Education*. Boston: Allyn and Bacon.
- Borich, Gary D (2012). *Effective teaching methods: Research based practice*. New Delhi: Pearson Education
- Leary, Zina O((2010). *Doing your research project*. New Delhi. SAGE
- Obul, Reddy D. (2000). Re-designing of commerce education in India in the context of changing business environment, *The Journal of Commerce*; Vol. 36(3).
- Raj, Rani Bansal (1999). *Models of teaching and concepts of learning*. New Delhi: Anmol Publications.
- Rao, Bhaskara (2005) *Curriculum for Learning to Live Together*. New Delhi: Discovery Publishing House.
- Seema Rao (1995). *Teaching of Commerce*. New Delhi: Anmol Publications.
- Singh and Gopal (2004) *Teaching Strategies*. New Delhi: APH Publishing Corporation.
- Singh, Y.K. (2007). *Teaching of Commerce*. New Delhi: APH Publishing Corporation.
- Sue, Cowley (2006) *A – Z of Teaching*. New York: Brij basi Art Press Ltd. Raj, Rani Bansal (1999). *New trends in teaching of Commerce: Models of teaching and concepts of learning*. New Delhi: Anmol Publications.
- <http://www.bbk.ac.uk/linkinglondon/resources/>
- [http://en.wikipedia.org/wiki/Learn\\_management\\_system](http://en.wikipedia.org/wiki/Learn_management_system)<https://www.itschool.gov.in>
- [www.youtube.com/user/itsvicters](http://www.youtube.com/user/itsvicters)
- [victers.itschool.gov.in/](http://victers.itschool.gov.in/)
- <http://www.edu.plymouth.ac.uk/resined/actionresearch/arhome.html>
- [http://www.ssamis.com/web/downloads/KCF\\_2007.pdf](http://www.ssamis.com/web/downloads/KCF_2007.pdf)
- [en.wikipedia.org/wiki/IT@School\\_Project](http://en.wikipedia.org/wiki/IT@School_Project)
- [www.youtube.com/user/itsvicters](http://www.youtube.com/user/itsvicters)
- <http://www.ncert.nic.in/html/pdf/schoolcurriculum/framework>
- <http://www.case.edu/artsci/engl/emmons/writing/pedagogy>

## EDU – 10.12 : TECHNO- PEDAGOGIC CONTENT KNOWLEDGE ANALYSIS – COMMERCE

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

### Objectives :

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

### CONTENTS :

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

**Unit 2 Networking in Commerce Learning**

**Unit 3 Models of Teaching in Commerce**

**Unit 4 Global Trends in Commerce Education.**

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

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To conscientize the prospective teachers become a techno-pedagogue 2. To become aware of the concept TPCK 3. To become capable of analyzing content based on technology	<ul style="list-style-type: none"> <li>• Inter relationship between Technology, Pedagogy and Content, Teacher as Techno-Pedagogue.</li> <li>• Scope and purpose of Techno-Pedagogic Content Knowledge Analysis.</li> <li>• TPCK based content analysis (Selected units)</li> </ul>	Meaningful verbal learning  Demonstration  On line learning	<ul style="list-style-type: none"> <li>• Prepare a self explanatory note on 'Teacher as a Techno-Pedagogue'</li> <li>• TPCK based Content analysis on any one unit.</li> </ul>

	of higher secondary commerce text book) <ul style="list-style-type: none"> <li>• Self Instructional Strategies: Importance</li> <li>• Programmed instruction</li> <li>• CAI,CMI, CML, Instructional modules</li> </ul>	Group discussion	
--	--	------------------	--

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

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To become competent to analyze the ways in which Professional and Institutional growth established through network twinning. 2. To become skillful while creating e-mail ID and blogs.	<ul style="list-style-type: none"> <li>• Professional and Institutional growth: Through network-twinning</li> <li>• Student and Institution Networking</li> <li>• Online learning: Concept and system of online learning, virtual learning.</li> <li>• Creation of e-mail ID and blogs</li> <li>• Applications of Social Networking systems</li> </ul>	Discussion  Online learning  Demonstration  Workshop  Group investigation	<ul style="list-style-type: none"> <li>• Concept maps</li> <li>• Observation</li> <li>• Product presentation</li> <li>• Report verification</li> </ul>

### Unit 3 Models of Teaching ( 18 Hrs + 8 Hrs)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To interlock 'models of teaching' in effective instructional practices of commerce education. 2. To categorize, analyzes and applied the varied instructional models in commerce discipline.	<ul style="list-style-type: none"> <li>• Models of teaching – Introduction, Operational Heart, Different families</li> <li>• Concept Attainment Model with lesson templates</li> <li>• Inquiry Training Model with lesson templates</li> <li>• Group Investigation Model</li> <li>• Cognitive Apprenticeship Model</li> <li>• 5 E model with lesson templates</li> </ul>	Demonstration  Group discussion  Co-operative learning	<ul style="list-style-type: none"> <li>• Discussion lesson (5- three out of five should be Models of Teaching)</li> <li>• Demonstration (2)</li> <li>• Criticism (5/ 3models of teaching)</li> </ul>

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

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
1. To analyze the global trends in commerce education through comparison between India with other countries. 2. To evaluate the significance of Entrepreneurship Education, Business Education and Accounting Education in modern era.	<ul style="list-style-type: none"> <li>• Global trends in commerce education</li> <li>• Commerce education with India and USA</li> <li>• Entrepreneurship Education – India V/S Japan</li> <li>• Business Education in India and Bangladesh</li> <li>• Accounting Education – Comparison with India and Australia</li> </ul>	Discussion  Brain storming  Inductive strategies  Thinking strategies	<ul style="list-style-type: none"> <li>• Idea presentation grid</li> <li>• Assignment and seminar reports</li> </ul>

**References**

- Raj, Rani Bansal (1999). New trends in teaching of Commerce: Models of teaching and concepts of learning. New Delhi: Anmol Publications.
- <http://tep.uoregon.edu/showcase/crmodel/strategies>
- [http://en.wikipedia.org/wiki/Entrepreneurship\\_education](http://en.wikipedia.org/wiki/Entrepreneurship_education)
- <http://www.guardian.co.uk/higher-education-network>
- [http://en.wikipedia.org/wiki/Technological\\_Pedagogical\\_Content](http://en.wikipedia.org/wiki/Technological_Pedagogical_Content)
- <http://teachinghistory.org/issues-and-research/roundtable>
- [www.net-security.org](http://www.net-security.org)
- <http://www.bbk.ac.uk/linkinglondon/resources/>
- [www.youtube.com/user/itsvicters](http://www.youtube.com/user/itsvicters)
- [en.wikipedia.org/wiki/IT@School\\_Project](http://en.wikipedia.org/wiki/IT@School_Project)
- [victers.itschool.gov.in/](http://victers.itschool.gov.in/)



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

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

### Objectives:

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

### Contents:

**Unit 1: Curriculum Designing in Home Science Education**

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

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

**Unit 4: Research Trends in Home Science Education**

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

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To acquaint with the concepts of curriculum and syllabus 2. To understand and apply the principles of curriculum construction 3. To familiarize with the curriculum organization 4. To familiarize with the recent trends in curriculum construction in state, national and international level	<ul style="list-style-type: none"> <li>• Curriculum and syllabus-Meaning, Definition, Nature</li> <li>• Principles of curriculum construction.</li> <li>• Types of curriculum-subject centred, activity centred, core curriculum, hidden curriculum</li> <li>• Approaches to curriculum organisation- Concentric approach, Spiral approach, Topical approach, General science and disciplinary approach</li> <li>• Critical analysis of Higher Secondary /Vocational Higher Secondary school curriculum in Home Science prescribed by</li> </ul>	Meaningful verbal expression  Buzz session  PBL  Co-operative learning  Seminar	<ul style="list-style-type: none"> <li>• Questioning</li> <li>• Role performance analysis in Buzz discussion</li> <li>• Concept mapping</li> <li>• Open book analysis</li> </ul>

<p>5. To understand correlation of Home Science within the subject as well as with other subjects.</p>	<p>SCERT.</p> <ul style="list-style-type: none"> <li>• Trends in curriculum construction-SCERT and curriculum, Critical Pedagogy, Issue based curriculum, Problem Based Learning- Main features.</li> <li>• Correlation- Incidental and systematic, Correlation within the subject, Correlation of Home Science with other subjects such as Biology, Physiology, History, Chemistry, Economics, Commerce, Management studies, and Environmental Education.</li> </ul>	<p>Group discussion</p> <p>Web Streaming</p> <p>Blog reading</p>	
--	---	--	--

### References

- Higher secondary Home Science text book (Plus 1 & Plus 2) prescribed by SCERT, KERALA
- Teacher's source book of Clothing and embroidery text book ( Vocational Higher Secondary-Fist & Second year ). SCERT, KERALA
- Bunnie Othanel Smith (1950): Fundamentals of Curriculum Development: California, World Book Company.
- Rao, Bhaskara (2005) Curriculum for Learning to Live Together. New Delhi: Discovery Publishing House.
- Singh and Gopal (2004) Teaching Strategies. New Delhi: APH Publishing Corporation.
- Nibedita,D.(2004). Teaching of Home Science. Dominant publishers and Distributors
- <http://www.ncert.nic.in/html/pdf/schoolcurriculum/framework>
- [http://www.ssamis.com/web/downloads/KCF 2007.pdf](http://www.ssamis.com/web/downloads/KCF%202007.pdf)
- <http://www.case.edu/artsci/engl/emmons/writing/pedagogy>

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

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
<p>1. To acquaint with the concept and significance of community based resources</p> <p>2. To familiarize various formal and informal learning contexts</p>	<ul style="list-style-type: none"> <li>• Community based resources- Meaning , need and significance</li> <li>• Human Resources- resource persons/ eminent persons and teachers from different fields of Home Science</li> </ul>	<p>Narrative expression sessions in small or medium groups</p>	<ul style="list-style-type: none"> <li>• Performance analysis in various participatory activities.</li> <li>• Quiz programme</li> <li>• presentation</li> <li>• Blog posting</li> </ul>

<p>3. To identify the contributions of human resources in local community</p> <p>4. To identify the material supports in learning Home Science</p>	<ul style="list-style-type: none"> <li>• Man made resources- Home science Library-importance and organisation, web resources, Home Science laboratory- Importance and organisation, Registers</li> <li>• Community Resources/ Informal learning contexts- Food Processing Units, Social welfare department, ICDS- Balwadi/Anganwadi, Creche and preschool, Institution for special education, Rehabilitation centres, Textile units, Small scale industries and cottage industries.</li> <li>• Material supports- Text book reader, work book, handbook, source book, Reference materials- Encyclopaedia, Newsletters, Journals, Learning module</li> <li>• Field trips and excursions- Need and importance</li> <li>• Home Science fairs and exhibition- Significance, organisation and evaluation</li> <li>• Home Science club-Significance, organisation and activities</li> </ul>	<p>Assignment</p> <p>Project</p> <p>Seminar</p> <p>Field trip</p> <p>Organization of Home science Expo</p> <p>Community resource mobilization / Contextual analysis</p>	<ul style="list-style-type: none"> <li>• Field trip</li> </ul>
--	---	---	--

### References

- Yadav,S.(1994) *Teaching of Home Science*, New Delhi:Anmol Publications
- Begum, F.(2004) *Modern Teaching of Home Science*. New Delhi:Anmol Publications
- Nibedita,D.(2004). *Teaching of Home Science*. Dominant publishers and Distributors
- Singh and Gopal (2004) *Teaching Strategies*. New Delhi: APH Publishing Corporation.

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

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
<ol style="list-style-type: none"> <li>To generate a broad perspectives of e-resources in instructional practices</li> <li>To develop skill in retrieving and transacting Home Science curriculum through e-resources</li> </ol>	<ul style="list-style-type: none"> <li>Concept of e- resources, Web resources, social networking, Educational blogs, e-journals, pod casting, e-learning, m- learning, and web based learning.</li> <li>Learning management system (LMS) in teaching learning of Home Science education.</li> <li>IT enabled instructional resources: On line resources, videos, YouTube resources, animations, film clippings.</li> </ul>	<p>Web Streaming</p> <p>Explicit teaching</p> <p>On line learning</p>	<ul style="list-style-type: none"> <li>Documentation</li> <li>Assessment of individual performance</li> <li>Use of e-resources in preparing learning materials</li> </ul>

**References**

- <http://www.bbk.ac.uk/linkinglondon/resources/>
- [http://en.wikipedia.org/wiki/Learn\\_management\\_system](http://en.wikipedia.org/wiki/Learn_management_system)<https://www.itschool.gov.in>
- [www.youtube.com/user/itsvicters](http://www.youtube.com/user/itsvicters)
- [en.wikipedia.org/wiki/IT@School\\_Project](http://en.wikipedia.org/wiki/IT@School_Project)
- [victers.itschool.gov.in/](http://victers.itschool.gov.in/)
- [www.youtube.com/user/itsvicters](http://www.youtube.com/user/itsvicters)

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

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
<ol style="list-style-type: none"> <li>To develop a positive attitude towards research</li> <li>To develop inquiry skills and scientific investigation</li> <li>To understand the wide scope of employability of Home science learning</li> </ol>	<ul style="list-style-type: none"> <li>An introduction to Research in Home Science Education- Need and importance</li> <li>Home Science Teacher as a researcher</li> <li>Analysis of Research outcomes in Home Science education both teaching and learning.</li> </ul>	<p>Group discussion on current researches in Home science education</p> <p>Action research</p>	<ul style="list-style-type: none"> <li>Performance assessment</li> <li>On line assignment</li> </ul>

		Seminar	
--	--	---------	--

### Reference

- Bunnie Othanel Smith (1950): *Fundamentals of Curriculum Development*: California, World Book Company.
- Dimitris Psillos & Hans Niedderer (2002): *Teaching and Learning in the Science Laboratory*: Netherlands, Kluwer Academic Publishers.
- Funda Ornek, Issa M. Saleh (Eds.) (2012): *Contemporary Science Teaching Approaches: Promoting Conceptual Understanding in Science*: USA, Information Age Publishing Group.
- Jeffrey Michael Reyes, Duncan Andrade, Ernest Morrell (2008): *The Art of Critical Pedagogy: Possibilities for Moving from Theory to Practice*: New York, Peterlang Publishing Inc.
- John Wallace, William Louden (2002): *Dilemmas of Science Teaching* [electronic resource]: perspectives on problems of practice: New York, Routledge.
- NCSECA (1995): *National Science Education Standards USA*, National Academic Press.
- Radha Mohan (2007): *Innovative Science Teaching*: New Delhi, Prentice Hall of India Pvt Ltd
- Yadav, S. (1994) *Teaching of Home Science*, New Delhi: Anmol Publications
- Begum, F. (2004) *Modern Teaching of Home Science*. New Delhi: Anmol Publications
- Nibedita, D. (2004). *Teaching of Home Science. Dominant publishers and Distributors*
- Singh and Gopal (2004) *Teaching Strategies*. New Delhi: APH Publishing Corporation.
- Harms N. & Yager R. (1981): *What Research Says to the Science Teacher* (Vol. 3): USA, National Science Teachers Association.

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

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

### Objectives:

- To undertake a self-empowerment initiative in transacting the Home Science curriculum from a Techno-Pedagogical Content Knowledge perspective
- To get acquainted with different aspects of collaborative use of information and communication technology
- To gain a perspective of basic theories and guiding plans for effective transaction of Home Science
- To understand the nature and importance of Home Science from a global perspective

### Contents:

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

**Unit 2: Networking in Home Science Learning**

**Unit 3: Models of Teaching in Home Science**

**Unit 4: Global Trends in Home Science Education**

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

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To conceptualize the basic principles of Techno-Pedagogic Content Knowledge Analysis in Home Science Teaching and Learning 2. To identify the role of science teacher as a techno-pedagogue 3. To understand various Self Instructional Strategies	<ul style="list-style-type: none"> <li>• Techno-Pedagogic Content Knowledge Paradigm-Interrelationship of Content Knowledge, Pedagogic Knowledge and Technological Knowledge, scope and purpose</li> <li>• TPCKA based content analysis- Higher Secondary /Vocational Higher Secondary Home Science text book</li> <li>• Science teacher as a techno-pedagogue.</li> <li>• Techno-pedagogic competencies,</li> <li>• Self Instructional Strategies- Meaning, Types- Programmed Instruction ,Modular Instruction, Personalized System of Instruction, CAI and CMI</li> </ul>	Small group discussion  Web searching demonstration  Power Point Presentations  Seminar  On line learning	<ul style="list-style-type: none"> <li>• Participant observation</li> <li>• Development of video script</li> <li>• On-task behaviour in class</li> <li>• Reflective journal</li> <li>• (Technological skill practice in classrooms)</li> </ul>

### References

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

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

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To grow to be competitive in designing digital texts and e-content in Home science Education 2. To become empower in surfing digital resource for transacting Home Science curriculum.	<ul style="list-style-type: none"> <li>• Professional and Institutional growth: Through network-twinning</li> <li>• Student and Institution Networking</li> <li>• Online learning: Concept and system of online learning, virtual learning.</li> <li>• Creation of blogs.</li> <li>• Applications of Social Networking systems</li> </ul>	Discussion  Online learning  Demonstration  Workshop  Group investigation	<ul style="list-style-type: none"> <li>• Digital document analysis</li> <li>• Blog posting</li> <li>• Debate</li> <li>• Online test</li> <li>• ICT based lesson designing and uploading in blog (1)</li> </ul>

**References**

- <http://teachinghistory.org/issues-and-research/roundtable>
- [www.5learn.co/e-content-development](http://www.5learn.co/e-content-development)
- [www.aptaracorp.com/digital-content-production/econtent-development](http://www.aptaracorp.com/digital-content-production/econtent-development)
- [www.ntu.edu.sg/home/sfoo/publications/2002/02ecdl\\_fmt.pdf](http://www.ntu.edu.sg/home/sfoo/publications/2002/02ecdl_fmt.pdf)
- [www.net-security.org](http://www.net-security.org)

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

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
1. To understand the application of major psychological theories in learning. 2. To understand various models of teaching and their practice.	<ul style="list-style-type: none"> <li>Psychological theories for learning science- A brief introduction of Piaget, Bruner, Gagne, Vygotsky and Ausubel, Gardener’s Multiple Intelligence Theory</li> <li>Models of teaching – Introduction, definition, elements and families of models of teaching</li> <li>Concept attainment model</li> <li>Inquiry training model</li> <li>Constructivist learning model</li> <li>Advance organizer model</li> <li>Group investigation model</li> </ul>	Meaningful verbal expression  Group discussion  Peer tutoring  Observation  Brain storming  Video analysis	<ul style="list-style-type: none"> <li>Analysis in group discussion</li> <li>Class test</li> <li>Discussion lessons (5, Three lessons out of five based on models of teaching)</li> <li>Demonstration lessons (2)</li> <li>Criticism lessons (5, Three lessons out of five based on models of teaching) - Performance, observation and recording</li> </ul>

**References**

- Bhattacharya S.P.(1994):ModelsofTeaching:NewDelhi,RegencyPublications.
- Bruce R.Joyce,MarshaWeilandEmilyCalhoun(2011):ModelsofTeaching(7thEd.):USA,PearsonEducation

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

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
1. To understand Global trends in relation to House Science Education	<ul style="list-style-type: none"> <li>Home Science education in the global scenario</li> <li>Home Science towards community Science-women entrepreneurships, Gender equality, extension and communication management system of selected developed and developing countries (USA,China, Japan) with special reference to</li> </ul>	Web streaming  Documentation  Invited lectures	<ul style="list-style-type: none"> <li>Document analysis</li> <li>Blog posting</li> <li>Involvement in subject association activity</li> <li>Video script: Development, enacting, recording and uploading)</li> </ul>



	<ul style="list-style-type: none"> <li>Brief history, approaches, organizational structure, linkage to research extension methods used and its comparative analysis with Indian system.</li> </ul>		<ul style="list-style-type: none"> <li>Script writing for radio talk on a topic in home Science</li> </ul>
--	--	--	--

### References

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

## EDU – 201.2 : Health and Physical education

( 2 credits – 60 hours & 50 marks )

### Objectives :

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

### Contents

- Unit – 1 Track & Field or Athletic events – general awareness, rules and regulations, organization.  
Unit – 2 Major and minor games – types, rules and regulations  
Unit – 3 Tournaments – knock out and league, fixtures for tournaments  
Unit - 4 Play & Recreation – need and importance, leisure time management, practice.  
Unit – 5 Mental Health – meaning, problems and techniques.

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

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. Acquire knowledge about the track and Field events	<b>Track and field or Athletic events.- 12 hours</b> <ul style="list-style-type: none"><li>• General awareness on athletics</li><li>• Rules and regulations of any one event in detail</li></ul>	Oral presentation Group activity Participation	<ul style="list-style-type: none"><li>• Group assessment</li><li>• Organizing sports meet</li><li>• Participation</li></ul>

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

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
1. Become familiar with major and minor games and to develop interest in sports and games	<b>Major and Minor games – 10 hours</b> <ul style="list-style-type: none"> <li>• Understanding major and minor games</li> <li>• rules and regulations of any one major game in detail</li> </ul>	Theoretical orientation  Virtual learning platforms	<ul style="list-style-type: none"> <li>• Group assessment</li> <li>• Intramural competitions</li> </ul>

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

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
1. Understand the ability to organize and participate in the conduct of sports and games	<b>Tournaments – 8 hours</b> <ul style="list-style-type: none"> <li>• Knock out, league and combination tournaments</li> <li>• Method of drawing fixtures under knock out and league tournaments</li> </ul>	Meaningful verbal expression  Group activity sessions in small and medium group	<ul style="list-style-type: none"> <li>• Group assessment</li> <li>• Assignments</li> </ul>
2. To familiarize the ways and measures to draw a standard athletic track.	<b>Track and field marking – 8 hours</b> <ul style="list-style-type: none"> <li>• standard 400 mts/200 mts Track marking</li> <li>• Field marking</li> </ul>	Verbal presentation  Group activity  Field work	<ul style="list-style-type: none"> <li>• Field analysis through group performance.</li> </ul>

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

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
<ol style="list-style-type: none"> <li>1. Understand the importance and values of recreational activities in the modern society</li> <li>2. Understanding of the psychological, sociological, and physiological significance of play &amp; recreation</li> <li>3. Practice recreational games</li> </ol>	<p><b>Play &amp; Recreation – 12 hours</b></p> <ul style="list-style-type: none"> <li>• Need &amp; Importance of Play &amp; Recreation</li> <li>• Play theories</li> <li>• Values associated with practice of play &amp; Recreation</li> <li>• Leisure time Management</li> <li>• Recreational Games</li> <li>• Practice of Recreational activities</li> </ul>	<p>Theoretical orientation</p> <p>Demonstration</p> <p>Group activity</p>	<ul style="list-style-type: none"> <li>• Group assessment</li> </ul>

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

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
<ol style="list-style-type: none"> <li>1. Understanding the importance of mental health and normal mental health problems to be addressed in general population</li> <li>2. Get acquainted with the relaxation techniques to overcome mental health problems</li> </ol>	<p><b>Mental Health – 10 hours</b></p> <ul style="list-style-type: none"> <li>• Introduction and overview of mental health</li> <li>• Mental health problems</li> <li>• Techniques to improve mental health</li> </ul>	<p>Narrative expressions</p> <p>Demonstration</p> <p>Practical sessions</p>	

**Guidelines for Practical work**

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

## **EDU – 201.3: ART EDUCATION AND THEATRE PRACTICE**

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

### **Contents:**

#### ***Theatre practice in curriculum transaction-***

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

### **Practicals:**

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

## **SEMESTER – III**

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

**Perspectives in Education/Core Subjects:**

**EDU - 11 : Developmental Perspectives of Education.**

**EDU - 12 :Learner in the Educational Perspective.**

**Curriculum and Pedagogic courses/Optional subjects:**

**EDU - 13. 1-13 : Emerging Trends and Practices in .....Education.**

## **EDU - 11: Developmental Perspectives in Education.**

**(Educational Management, Environmental Education, Health Education and Entrepreneurship Education)**

**(Theoretical discourse 60 and CE - 30 hrs)**

### **Objectives:**

- To develop an understanding of the concept of Management and Educational management.
- To discuss the contribution which management theory can make to understanding management practices
- To explain the meaning of the terms: management and leadership in education
- To develop an understanding of how to apply knowledge, skills and attitudes in educational management to enable more effective resource planning, organization and co-ordination of school programmes and activities, and directing, controlling and evaluating of the teaching and learning processes in school.
- To familiarize with the Total Quality Management in Education
- To develop entrepreneur interests and skills in students enabling them to explore career prospects.
- To develop an understanding of Environmental Education
- To create an awareness of environmental movements, laws and rights and to practice eco friendly life style.
- To sensitize towards disaster management
- To sensitize towards the concept of sustainable development.
- To develop knowledge of the fundamentals of Health, Health Education and Physical fitness.
- To Guide the next generation to live with social commitment and obligations.

### **Contents :**

#### **A. Educational management and Entrepreneur education**

**Unit 1: Introduction to Educational management (10hrs)**

**Unit 2: Aspects of school management(15 hrs)**

#### **B. Environmental and Health Education**

**Unit 3: Environmental awareness and importance of Environmental Education (14 hrs)**

**Unit 4: Disaster management (6hrs)**

**Unit 5: Health Education (15 hrs)**



**Unit 1: Introduction to Educational Management (10 hrs)**

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
1. To familiarize with the concept, meaning and characteristics of management. 2. To enable the student teacher to understand the functions of management 3. To familiarize with modern theories of management 4. To acquaint with concept, principles, importance and components of educational management 5. To enable the student to understand the structure of management at different levels	<ul style="list-style-type: none"> <li>• Concept, Meaning and Characteristics of Management.</li> <li>• Functions of Management.</li> <li>• Theories of Management (Taylor’s Theory, Fayol’s Theory and Peter Drucker’s Theory)</li> <li>• Concept, Scope, Principles and Importance of Educational Management</li> <li>• Components of management of Educational system.</li> <li>• Structure of Educational management in Kerala at Central, State and Local level</li> </ul>	Verbal discourse Group discussion Narrative expression in small groups Brain storming Collaborative interaction on Meaningful verbal Learning Verbal interaction	<ul style="list-style-type: none"> <li>• Reflection</li> <li>• Oral questions</li> <li>• Role performance assessment</li> <li>• Quizzes</li> <li>• Observation of involvement in interaction</li> <li>• Journal writing</li> </ul>

**Unit 2 Aspects of school management (15 hrs)**

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
1. To know about the importance and concept of institutional planning and make the students realise the	<ul style="list-style-type: none"> <li>• Institutional Planning- Concept, Importance, Steps and role of HM in institutional planning.</li> </ul>	School visit and Collaborative discussion	<ul style="list-style-type: none"> <li>• Report writing</li> <li>• Participant observation</li> <li>• Performance assessment</li> </ul>

<p>role of HM in the planning</p> <ol style="list-style-type: none"> <li>2. To acquaint with various resource management at school</li> <li>3. To familiarize with importance and types of time table and understand the principles of framing it.</li> <li>4. To develop the skill in organizing a school plant and maintaining the school records and registers</li> <li>5. To develop a clear perception about the human resources and their duties.</li> <li>6. To understand the concept of leadership and various styles of leadership.</li> <li>7. To get a clear idea about the roles and responsibilities of the head of the institution</li> <li>8. To gain an overview on the roles of teacher as learning facilitator and classroom manager</li> <li>9. To explore the importance of entrepreneurship education its phases and the major entrepreneurship skills that can be developed in a learner</li> <li>10. To reinforce entrepreneurial education for teacher trainers</li> <li>11. To explore the avenues as</li> </ol>	<ul style="list-style-type: none"> <li>• Resource Management</li> <li>• Time Management- concept of time management.</li> <li>• Timetable- Importance, Principles of framing Time Table and Types of Time Table</li> <li>• Material Resource Management</li> <li>• Organization of School Plant- school site, building, infrastructure</li> <li>• School records and registers- Types and maintenance.</li> <li>• <b>Human Resource Management</b></li> <li>• <b>Headmaster-</b> Qualities, Roles, Duties and responsibilities, Concept of Leadership, Styles of leadership.</li> <li>• <b>Teacher-</b> Qualities and Roles of Teacher as learning facilitator and classroom manager – planning and providing learner friendly learning experiences and innovative learning strategies, meeting the needs of heterogeneous learners.</li> <li>• <b>Learner-</b> Education for trained manpower - Entrepreneurship Education, Concept, functions, need and importance and Process of entrepreneurship</li> <li>• Phases of entrepreneurship- sensitizing, training, qualification and coaching.</li> <li>• Entrepreneurial skills-Goal setting, Planning , Creative thinking, Research, Decision</li> </ul>	<p>Practical experience</p> <p>Active class room learning</p> <p>During school induction and practice teaching</p> <p>Discussion in small groups</p> <p>Peer tutoring</p> <p>Seminar and discussion</p> <p>Reflective practices</p> <p>Visit to institutions</p> <p>Interactive session</p> <p>Discussion</p> <p>Role play</p> <p>Workshops</p> <p>Project method</p> <p>Participant observation</p> <p>Student led enquiry and discovery</p> <p>Active learner centered learning activities</p>	<ul style="list-style-type: none"> <li>• Document reporting</li> <li>• Preparation of learning materials</li> <li>• Observation of involvement</li> <li>• Analysis of reports</li> <li>• Tests</li> <li>• Assessment of tour report</li> <li>• Observation of involvement in interactions.</li> <li>• Performance Assessment</li> <li>• Performance Assessment</li> <li>• Assessment of reports</li> <li>• Discussion</li> <li>• Observing the interactions</li> <li>• Tests</li> <li>• Rubrics</li> <li>• Assessment of learner involvement and creativity</li> <li>• Assignment assessment</li> <li>• Evaluation of project</li> <li>• Teacher observation</li> <li>• Performance assessment in group discussion</li> <li>• Peer evaluation</li> <li>• C E</li> <li>• Evaluation based on umentation</li> </ul>
--	--	--	---

<p>entrepreneurs in educational field</p> <p>12. To acquaint with various academic supports in school management activities</p> <p>13. To familiarize the importance of PTA ,Staff Council and Student Council</p> <p>To realize the importance of co-curricular activities in the personality development of alearner</p> <p>14. To develop an awareness about the need of professional growth of teachers and familiarizing different programmes and organizations to attain professional development</p> <p>15. To get a clear idea about Total Quality Management and Quality Indicators</p> <p>16. To acquaint with the concept and applications of SWOC analysis</p>	<p>making, Risk bearing, problem solving.</p> <ul style="list-style-type: none"> <li>• Evolving career prospects of teachers-</li> <li>• Content writers, e-content developers, content editors, translators, educational software developers, publishers, career counselors ,education journalists, start up initiatives etc.</li> <li>• <b>Academic support systems</b></li> <li>• Library (school information system), Laboratory, Museum.</li> <li>• PTA, Staff Council, student council-organizational structure and functions</li> <li>• Co-scholastic activities- organizing co-curricular activities, Morning Assembly, various clubs-science, mathematics and literary club, Sports and Games, Celebrations of days of national importance, Field trips.</li> <li>• Professional growth of teachers-need, programmes, and organizations</li> <li>• Total Quality Management- Concept and importance, Quality Indicators, SWOC analysis-concepts and steps</li> </ul>	<p>Library reference and observation</p> <p>Collaborative discussion</p> <p>Projects</p> <p>Seminar</p> <p>Participant observation</p> <p>Participation in school activities</p> <p>Involvement in activities</p> <p>Small group discussion</p> <p>Brain storming</p> <p>Institutional visit</p> <p>Participation in school activities</p>	<ul style="list-style-type: none"> <li>• Assignment evaluation</li> <li>• Evaluation of Practicum</li> </ul>
--	---	--	--

**Unit 3 Environmental awareness and importance of Environmental Education (14 hrs)**

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
<ol style="list-style-type: none"> <li>1. To understand the concept and components of environment</li> <li>2. To identify the types of environmental resources</li> <li>3. To realize the significance the biodiversity in protecting the environment</li> <li>4. To understand the concept, and importance of environmental education.</li> <li>5. To understand the importance of studying environmental education at various levels</li> <li>6. To realize the impact of human interventions on environment</li> <li>7. To realize the consequences of human actions on the environment</li> <li>8. To acquaint with various types of pollution</li> <li>9. To develop a positive attitude towards the need for reducing global warming and related consequences</li> <li>10. To practice environment protection measures in personal life.</li> <li>11. To conduct</li> </ol>	<ul style="list-style-type: none"> <li>• Concept and components of Environment, Natural and Manmade Environment</li> <li>• Environmental resources- types, Biodiversity-types and significance</li> <li>• Environmental education-concept and importance</li> <li>• Need of incorporating EE at various levels- Primary, Secondary and Tertiary level</li> <li>• Objectives and Principles of EE</li> <li>• Human interventions , its impact on Environment and measures of Environmental protection</li> <li>• Deforestation, Quarrying and Mining, Destruction of mangroves, sacred groves and wetlands, Population Explosion, Pollution-types, causes and effects. Depletion of Biodiversity, Extinction of species-</li> <li>• Climate change, water scarcity, loss of arable soil, global warming, ozone depletion, greenhouse effect.</li> <li>• Waste management, wildlife and forest conservation, water conservation, green culture, alternative sources of energy, organic farming, vermi composting.</li> <li>• <b>3. B) Education for sustainable</b></li> </ul>	<p>Observation</p> <p>Video Presentation</p> <p>Hands on experience</p> <p>Field study</p> <p>Project method</p> <p>Group tasks</p> <p>Small group discussion</p> <p>Field trip and observation</p> <p>Project method</p> <p>Workshops</p> <p>Poster presentation</p> <p>Action research</p> <p>Individual and group projects</p> <p>Problem bases</p>	<ul style="list-style-type: none"> <li>• Report writing</li> <li>• Work book analysis</li> <li>• Project analysis</li> <li>• Participation of students</li> <li>• Assignments</li> <li>• Diary writing</li> <li>• Practicum</li> <li>• Performance based assessment</li> <li>• Role assessment</li> <li>• Analysis of problem solving</li> <li>• Assessment of innovative ideas</li> <li>• Class Test</li> <li>• Individual assessment</li> </ul>

<p>conscientizationprogramme on reducing the environmental pollution</p> <p>12. To gain knowledge about the various environmental laws and rights</p> <p>13. To familiarise with the constitutional provisions regarding the environmental protection</p> <p>14. To apply the environmental laws and principles when need arises</p> <p>15. To familiarise with the international efforts on environmental protection</p>	<p><b>development- Concept and significance (6 hrs)</b></p> <ul style="list-style-type: none"> <li>• Sustainable practices and role of students .</li> <li>• Role of Governmental agencies and NGO s in environmental protection.</li> <li>• Environmental laws and rights- Air act, Water act, Wildlife Protection act, Forest Conservation act , Articles 48 A, 51 A(g), International Protocols- Earth Summit, Kyoto Protocol, Montreal Protocol, Stockholm Conference.</li> </ul>	<p>learning</p> <p>Work shops</p> <p>Projects</p> <p>Lecture method</p> <p>Internet based learning</p>	
---	---	--	--

**Unit 4 Disaster management (6hrs)**

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
<p>1. To familiarise the concept of disaster management</p> <p>2. To familiarize with the phases of disaster management</p> <p>3. To familiarise with the mentioned disasters</p> <p>4. To prepare an action plan for disaster prevention and preparedness</p>	<ul style="list-style-type: none"> <li>• Meaning and concept of disaster management</li> <li>• Phases of disaster management – Steps and brief description only</li> <li>• Prevention and preparedness for Flood, Land slide, Fire and Earthquake</li> </ul>	<p>Small group discussion</p> <p>Action plan preparation</p> <p>Expert talk</p> <p>Role play</p> <p>Power point</p>	<ul style="list-style-type: none"> <li>• Participation in discussion</li> <li>• Role assessment</li> <li>• Documentation analysis</li> </ul>

		presentation	
--	--	--------------	--

**Unit 5 Health Education (15 hrs)**

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
1. Acquire knowledge of the fundamentals of Health, Health Education and Physical fitness.	<ul style="list-style-type: none"> <li>• Health &amp; Health Education</li> <li>• Meaning, importance and factors affecting Health</li> <li>• Significance, scope ,aims and objectives of Health Education</li> </ul>	Meaningful verbal presentation	<ul style="list-style-type: none"> <li>• Test</li> </ul>
2. Develop right attitudes and habits for a healthy living in personal and community life. 3. Guiding the next generation to live with social commitment and obligations.	<ul style="list-style-type: none"> <li>• Hygiene &amp; Health Hazards</li> <li>• Personal and Community Hygiene</li> <li>• Smoking ,Alcoholism and Abuse of drugs</li> </ul>	Dramatization Presentations in small/medium groups	<ul style="list-style-type: none"> <li>• Evaluation of daily reflective behavior</li> <li>• Test</li> </ul>
4. To impart knowledge regarding food and nutrition, first aid and the importance of posture. 5. Develop awareness about various lifestyle diseases and their prevention.	<ul style="list-style-type: none"> <li>• Understanding Nutrition</li> <li>• - Macro and Micro Nutrients</li> <li>• Carbohydrates,Protein,Fat,</li> <li>• Vitamins (Fat soluble and water soluble),Minerals,Water &amp;Fibre</li> <li>• Balanced diet</li> <li>• Vitamin deficiency diseases</li> <li>• Malnutrition</li> <li>• Diseases - Lifestyle diseases and it's management( Obesity, Hypertension ,Diabetes and Osteoporosis)</li> </ul>	Narrative expressions Group activity Personal profiles  Verbal orientation  Demonstration Group activity Verbal presentation Preparation of database	<ul style="list-style-type: none"> <li>• Debating and discussions</li> <li>• Test</li> <li>• Survey reports</li> <li>• Group presentation</li> <li>• Posture assessment Grid</li> </ul>

	<ul style="list-style-type: none"> <li>• Common communicable diseases – Symptoms ,causes and prevention</li> <li>• First Aid</li> <li>• Definition</li> <li>• Aims and Principles</li> <li>• Management of fracture, Dislocation, Wounds, Sprain, Strain, Cramp, Fainting, Burns, etc.</li> <li>• Posture</li> <li>• Congenital and acquired postural deformities</li> <li>• Remedial measures for acquired postural problems</li> </ul>		
--	--	--	--

### References

- Agarwal J.C (2008) Development and Planning of Modern Education, Meerut: R.Lall Book Depot.
- Agarwal , V (et al) (1980) Approaches to School Management, London: Harper & Row Publishers.
- Bhatnagar, S.S. ,& Gupta , P.K. (2006). Educational Management. Meerut: Lall Book Dept.
- Bhatnagar, R.P and Agarwal, V (1986) Educational Administration and Management, Meerut: Lall book Depot.
- Buch, T et.al (1980) Approaches to School Management, London: Harper and Row Publishers.
- Chakraborty, A.K. (2004) Principle and Practice of Education. Meerut: R.Lall Books Depot.
- Chaube, S.P & Chaube. A (2008), School Organisation, New Delhi: Vikas Publishing House.
- Chaube A Chaube. (2003). School Organization, New Delhi: Vikas Chaudhary, N.R. (2001). Managements in education. New Delhi: Anmol Publications.
- Daniel. D. C (2012) Environmental Science , Jones and Bartlett India Pvt, Ltd.
- Dash, B.N (2003), School Organisation, Administration and New Delhi: Nilkamal Publications.
- Jyothi, M.K .& Pandey, B, N (2008) Disaster Management , New Delhi:
- APH Publishing Corporation.
- Kaushik Vijayakumari (1997), School Education Mangement, New Delhi: Anmol Publications.

- Kiran B Chhokar, Mamata Pandya and Meena Raghunathan (2006) Understanding Environment , New Delhi: Sage Publications India Ltd.
- Kumar , A (2009) A text book of Environmental Science , New Delhi: APH Publishing Corporation.
- Kochhar, S.K (2005) School Organisation and Administration, New Delhi: Sterling Press.
- Mathur , S.S (2005) Educational Administration and Management , New Delhi: Vikas Publishing house.
- Mishra, Shubhrata R & Yada, P R (2004). Environmental Ecology, New Delhi: Discovery Publishing House.
- Mohanty, Jagannath (2004), School Management New Trends and Innovations, New Delhi: Deep and Deep Publications.
- Mohanty, Jagannath (2005), School Management, New Delhi: Deep and Deep Publications.
- Mohanty, Jagannath (2005) Education Administration, Supervision, School Management, New Delhi: Deep and Deep Publications.
- Mukherji, S.N (1998) Administration of Education in India, New Delhi: Anmol Publications.
- Nagor , A.P (1996) Biological Diversity and International Environmental Laws: New Delhi.
- Namita Roy Chaudhary (2005) Management in Education, New Delhi: A. P.H. Publishing corporation.
- Nasrin , Dr (2008) Environmental Education, New Delhi: APH Publishing Corporation.
- Pandya, S.R (2004) Administration and management of Education, Himalaya Publishing House: New Delhi.
- Sachdeva, M.S (2001) School Organisation and Administration, Agra: Bhargava Book House.
- Sharma , R.A (2008) Environmental Education, New Delhi : R.Lall Books Depot.
- Sharma B.L & Maheswari, B.K (2008) Education for Environmental and Human Value
- Siddhu, Kulbir Singh (2011) School Organisation and Administration, Mumbai: Sterling Press. Taj, Haseen (2005) School Management and Administration, Agra: Bhargava Book house.
- Singh. Y.K (2009). Teaching of Environmental Science. New Delhi: APH Publishing Corporation ..
- Singh , Sudhir, Tana, N.C & Anand, Rajesh (2009) Disaster Management & Sustainable Development – Emerging Issues and concerns, New Delhi: Pentagon Press.
- Subrahmanian, V (2005) A text book in Environmental Science , New Delhi : Narosa Publishing house Pvt Ltd.
- Tripathi. A.K & Pandey, S.N (1990) Water Pollution: New Delhi: Abhilash Publication House.
- Veer, U (2008), Modern School Organisation, Delhi: Vikas Publishing House.





## **EDU – 12 : Learner in the Educational Perspective.**

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

### **Objectives: To enable the student teacher:**

- To integrate the values among learners
- To synthesis the role of learning for meaningful existence
- To understand rights and duties of an Indian citizen
- To develop an attitude to eliminate gender bias in educational institutions and society
- To develop strategies to empower girl students
- To familiarise the life skills among the learners
- To practice and enhance the mental and physical strength among students
- To acquaint with the guidance and counselling procedures
- To educate the trends and practices of classroom management.
- To equip student teachers professionally competent for inclusive classrooms.
- To analyze human behaviour and communication through Transactional Analysis

### **Contents :**

UNIT I: LEARNER AND MEANINGFUL EXISTENCE

UNIT II: GENDER, SCHOOL AND SOCIETY

UNIT III: DEVELOPING AN INTEGRATED LEARNER

UNIT IV INTEGRATING PROFESSIONAL COMPETENCYFOR INCLUSIVE CLASSROOM

**UNIT I: LEARNER AND MEANINGFUL EXISTENCE 20hours (15T+5P)**

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To inculcate values in the changing social scenario 2. To integrate learner with learning in a holistic manner 3. To understand Duties and Rights of Indian Citizens	<ul style="list-style-type: none"> <li>• Four pillars of education suggested by UNESCO</li> <li>• Citizenship Training- Duties and Rights of Indian Citizens</li> <li>• Peaceful coexistence and need for peace education</li> <li>• Prohibition of child Labour</li> <li>• Value integration- Concept of Purusharthas- Human Values- Social Values-biological values- Aesthetic values- National values-values laid down in Indian constitution- Universal values- Strategies for inculcating values</li> </ul>	Lecture discussion  Silent sittingvisual experiences  Anecdotes  The Stage Specific Focus  Group activities  Organised discussion and reflective exercises  Workshop  Debates  Role plays, Stories  Symposium	<ul style="list-style-type: none"> <li>• Response analysis</li> <li>• Extension activity with a motive of Value inculcation and Performance based assessment</li> <li>• Unit Test</li> </ul>

**References**

- .Agarwal. J.C (2006). Education for values, Environment and Human Rights. Shiprapublications . New Delhi
- Yogendra Singh.(2007). Modernisation of Indian tradition. Rawat publication. New Delhi
- Dyakara Reddy D. & Rau.(2007). Value education. Discovery publishing House. New delhi
- Dhananjaya Joshi.(2006). Value education in global perspectives, Lotus Press
- Value-based Human Resource Strategy: Developing your HR Consultancy RolePaperback– Import, 4 Sep 2003
- by Tony Grundy(Author), Laura Brown(Author)

**UNIT II:GENDER, SCHOOL AND SOCIETY ( 25Hrs 15 T+10 P )**

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
1. To analyse the historical perspectives of gender bias 2. To adopt strategies to address gender issues in education	<ul style="list-style-type: none"> <li>• Gender bias in India- Historical and Socio-cultural perspectives and gender specific roles- Gender equity and significant role of women during Dravidian and Vedic culture</li> <li>• Situations of gender differences – Educational, Social, Political, Economical,</li> <li>• Gender bias in educational institutions- in the development of curriculum and textbooks- in the management of the school Strategies for addressing gender issues in education</li> <li>• Empowerment of girls as empowerment of society and role of teacher to develop attitude of equity- policy and management-women's action groups</li> <li>• Gandhian views on women empowerment- A synthesis of pragmatism and idealism</li> </ul>	Lecture discussion  Workshop  Debates  Symposium  Multimedia presentation	<ul style="list-style-type: none"> <li>• Response analysis</li> <li>• Extension activity with a motive of Value inculcation.</li> </ul>

**References**

- Pachuari, S.K. (1995), Women and Human Rights, Delhi, .APH, Publication
- Reimer Everett (1971), School is Dead, Harmondsworth Middlesex, England, Penguin Books Ltd
- <http://www.ide.go.jp/English/Publish/Download/Vrf/pdf/426.pdf>
- <http://www.isical.ac.in/~wemp/Papers/PaperItismitaMohanty.pdf>
- <http://www.legalservicesindia.com/article/article/the-role-of-education-sector-in-removing-gender-inequality->

**UNIT III: DEVELOPING AN INTEGRATED LEARNER    20 hours (15T+5 P)**

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
<ol style="list-style-type: none"> <li>1. To familiarise the life skills among the learners</li> <li>2. To practice and enhance the mental and physical strength among students</li> <li>3. To acquaint with the guidance and counselling procedures</li> <li>4. To nurture mental health and mental Hygeine among learners</li> <li>5. To promote healthy behaviour and healthy relations .</li> </ol>	<ul style="list-style-type: none"> <li>• Meaning and scope of <b>Life skill education</b>- WHO classification of life skills- Strategies for applying life skills for capacity development <b>Guidance and counselling</b> – Meaning, scope, types, procedure and, organisation of guidance cell- Application in inclusive classrooms.</li> <li>• <b>Counselling</b> - meaning and nature of <b>Counselling skills</b>- adolescent issues and their management-Sexual harassment, Substance abuse - Impact of media/ Internet/ mobile - Depression and suicide- causes and remedies.Counselling skills and procedure</li> <li>• <b>Mental Health and Hygiene</b> – Characteristics, Role of Home and School</li> </ul>	<p>Lectures</p> <p>Interview</p> <p>Puppetry</p> <p>Life skill Camps</p> <p>Prepare activities based on life skills</p> <p>Prepare sample script for role play</p> <p>Develop an activities to foster life skills in the classroom</p> <p>Design of Strategies for promoting emotional stability</p> <p>Conduct mock counselling sessions</p>	<ul style="list-style-type: none"> <li>• Field visit</li> <li>• Role Play</li> <li>• Practical work</li> <li>• Assignments</li> <li>• Seminar presentation</li> <li>• Test paper</li> <li>• Performance based assessment</li> </ul>

**References**

- Garnezy,N.&Rutter ,M (1998) .Stress ,copingand development in children.Newyork:McGraw-Hill
- Gottman ,J.M .(1983).Raising an emotionally intelligent child .Newyork:Fireside
- IGNOU(2011) Life Skill develoment,SOE .NewDelhi, IGNOU.
- Dwyer, D. &Scampion, J (1995): Psychology A- Level: Great Britian: Mcmillan.

- Barochisky, G.B Poeytes Book ( 1984)Intelligence Procedures in Psychology, Philadelphia
- Verma,S.(2014).*Development of Life Skills and Professional Practice*,Vikas Publishing House;
- Gladding ,(2001) *Counselling –A Comprehensive Profession* : Pearson
- Teele, Sue (2000), *Rainbow of Intelligence: Exploring how students Learn*, California: Corwin Press Inc.

**UNIT IV:INTEGRATING PROFESSIONAL COMPETENCYFOR INCLUSIVE CLASSROOMS 25 hours(15T+10P)**

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To familiarise the trends and practices of classroom management. 2. To practice and enhance the behavior management strategies . 3. To acquaint with the behaviouralchanges occur within a social group or between social groups . 4. To analyse human behaviour and communication.through Transactional Analysis 5. To equip student teachers professionally competent.	<ul style="list-style-type: none"> <li>• Classroom management –trends, practices and strategies, Behaviour management</li> <li>• Group Dynamics- Sociometry and types of leadership</li> <li>• Forces operating within a group in social interaction</li> <li>• Transactional Analysis –Ego states, Egogram- significane in education</li> <li>• Professional competency for inclusive classroom by incorporating the above aspects</li> </ul>	Open meeting of Parents Construction of sociometry in a group Interviews Group discussion Prepare activities based on Leadership skills Self evaluation by Egogram	<ul style="list-style-type: none"> <li>• Field visit</li> <li>• Role Play</li> <li>• Practical work</li> <li>• Assignments</li> <li>• Seminar presentation</li> <li>• Test paper</li> <li>• Performance based assessment</li> </ul>

**References**

- Berne, Eric. (1961)*Transactional Analysis in Psychotherapy*. Grove Press, Inc., New York.
- Stewart, Ian and Joines, Vann. (1987)*nTA Today: A New Introduction to Transactional Analysis*. Lifespace Publishing, Chapel Hill, North Carolina.
- Newell,S& Jeffery D.(1990).*Behaviour Management Classroom, A Transactional Analysis Approach*, Letts.

- Gates, A.S and Jersild, A.T (1970) Educational Psychology, New York : Macmillian
- <http://www.teachers.org.uk/node/16308>
- [www.transactional-analysis.org/teachers.htm](http://www.transactional-analysis.org/teachers.htm)[www.unicef.org/crc/](http://www.unicef.org/crc/).
- Agarwal. J.C (2006). Education for values, Environment and Human Rights. Shiprapublications . New Delhi
- AnupryaChadha(2007) ‘special education” APH publication, New Delhi
- Atwater, (2010), Psychology for Living ,Adjustment,Growth and Behaviour Today : Pearson
- Barochisky, G.B Poeytes Book ( 1984)Intelligence Procedures in Psychology, Philadelphia
- Berne, Eric. *Transactional Analysis in Psychotherapy*. Grove Press, Inc., New York, 1961. Page 4.by Tony Grundy(Author), Laura Brown(Author)
- Carnoy, M. and Rhoten, N. D. (2002). What does globalization mean for educational change? A comparative approach,Comparative education review,46: 1-9.
- Dhananjaya Joshi.(2006). Value education in global perspectives, Lotus Press
- Dhiman.O.P(2007)”Principles & Techniques of Education”,Kalpaz publication, New Delhi
- Dyakara Reddy D. & Rau.(2007). Value education. Discovery publishing House. New delhi
- Gates, A.S and Jersild, A.T (1970) Educational Psychology, New York : Macmillian
- Gates, A.S and Jersild, A.T (1970) Educational Psychology, New York : Macmillian
- Geoff Colvin , 2012 , Managing the cycle of acting out behaviour in the classroom. , Corvin Publications
- Harry K Wong , The Classroom Management ,2014 , Wong publications .
- Ian Stewart and Vann Joines , 1999, TA Today
- Judith Grunert(2008) “The course syllabus: a learning centered approach”
- Newell,S& Jeffery D.(1990).*Behaviour Management Classroom, A Transactional Analysis Approach*, Letts.
- Spring, J. (2009). “Globalization of Education: An Introduction”. New York: Routledge.
- Sr Ann Maria 2011 , Kaivilakku-Group Dynamics and TA , Jeevan Books
- Stewart, Ian and Joines, Vann. *TA Today: A New Introduction to Transactional Analysis*. Lifespace Publishing, Chapel Hill, North Carolina. 1987
- Teele, Sue (2000), Rainbow of Intelligence: Exploring how students Learn, California: Corwin Press Inc.
- Value-based Human Resource Strategy: Developing your HR Consultancy RolePaperback– Import, 4 Sep 2003
- Yogendra Singh.(2007). Modernisation of Indian tradition. Rawat publication. New Delhi

## Websites

- [www.organisation.health](http://www.organisation.health)
- [www.psy.chbytes](http://www.psy.chbytes).
- [www.unicef.org/crc/](http://www.unicef.org/crc/).
- [http://en.wikipedia.org/wiki/Education for all](http://en.wikipedia.org/wiki/Education_for_all).
- World Health organisation (WHO) .1997. Life Skill Education in Schools .
- [www.ccrinfo.org/](http://www.ccrinfo.org/)
- [www.learning and teaching.info/learning/constructivism](http://www.learningandteaching.info/learning/constructivism)
- [www.tesindia.com/teaching-resources/](http://www.tesindia.com/teaching-resources/)
- <http://airccse.org/journal/jcsit/0810ijcsit07.pdf>
- <http://www.edutopia.org/how-use-social-networking-technology>
- <http://www.educationalnetworking.com/>
- <http://www.teachers.org.uk/node/16308>
- [www.transactional-analysis.org/teachers.htm](http://www.transactional-analysis.org/teachers.htm)[www.unicef.org/crc/](http://www.unicef.org/crc/).
- [http://en.wikipedia.org/wiki/Education for all](http://en.wikipedia.org/wiki/Education_for_all).



## EDU – 13.1 : Emerging Trends and Practices in Malayalam Education

(theoretical discourses – 60 & CE – 30 hours)

### Objectives :

- To get familiarized with self-instructional strategies and integrated approach in teaching Malayalam
- To get acquainted with assessment strategies of Malayalam Education
- To understand and practice the concept - Material Design for Curriculum Transaction in e-platform
- To comprehend the concepts and practices related to 'reflective practice.'

### Contents :

- **Modern Instructional Strategies in Malayalam Education .**
- **Integrated Approach in Teaching Malayalam.**
- **Strategies of Assessment in Malayalam Education.**
- **Material Design for Curriculum Transaction in e-platform.**
- **Teacher as a Reflective Practitioner .**

### Unit 1 Modern Instructional Strategies in Malayalam Education

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To get familiarized with self-instructional strategies and integrated approach in teaching Malayalam	<ul style="list-style-type: none"> <li>• Workshop, Seminar, Symposia, Debates</li> <li>• Video content generation</li> <li>• e-learning, M-learning, Virtual Learning</li> <li>• e-tutoring, Online Courses</li> <li>• <b>Integrated Approach in Teaching Malayalam</b></li> <li>• Significance</li> <li>• Different types</li> <li>• Interdisciplinary Approach</li> </ul>	<p>Discussion on given reading materials.</p> <p>Preparation of modules</p> <p>Workshop for the familiarization of CAI, CMI</p>	<ul style="list-style-type: none"> <li>• Participation</li> <li>• Completeness</li> <li>• Involvement in the workshop</li> <li>• Comprehensiveness</li> <li>• CE - Test</li> </ul>

	<ul style="list-style-type: none"> <li>• Stages of application</li> <li>• Integrated learning activities</li> </ul>	Preparation of short notes on types of integrated approach	
--	---	--	--

### Unit 2 Strategies of Assessment in Malayalam Education

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To get acquainted with assessment strategies of Malayalam Education	<ul style="list-style-type: none"> <li>• Different Types</li> <li>• Continuous and comprehensive Evaluation- CCE</li> <li>• Evaluation criterion for different learning activities</li> <li>• Importance of Rubrics</li> <li>• Evidence based performance assessment through 'Portfolios'</li> <li>• Construction and administration of achievement test and diagnostic test</li> <li>• Significance of grading system in schools</li> </ul>	<p>Discussion on various assessment strategies.</p> <p>Practical sessions for creating rubrics</p> <p>Preparation of portfolios , Collection of evidences</p> <p>Practice sessions for test construction</p> <p>Debate on grading system prevailing in school education</p>	<ul style="list-style-type: none"> <li>• CE - Innovative Work</li> <li>• Participation in discussion</li> <li>• Manner of presentation</li> <li>• Preparation of rubrics</li> </ul>

### Unit3 Material Design for Curriculum Transaction in e-platform

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To understand and practice the concept - Material Design for Curriculum Transaction in e-platform	<ul style="list-style-type: none"> <li>• Significance in language teaching</li> <li>• E-content design and development</li> <li>• Copy Writing</li> </ul>	<p>Discussions on the significance of Material Design for Curriculum Transaction in e-platform</p> <p>practice sessions on E-content design and development</p> <p>Assignments</p>	<ul style="list-style-type: none"> <li>• Participation of students</li> <li>• Performance of students in the practical sessions compliance</li> </ul>

### Unit 4 Teacher as a Reflective Practitioner

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To comprehend the concepts and practices related to 'reflective practice.'	<ul style="list-style-type: none"> <li>• Teacher as a professional – concept of CPD (Continuous Professional Development )</li> <li>• Feedback</li> <li>• Reflective practices</li> <li>• Video Lesson</li> <li>• Reflective Journal</li> </ul>	<p>Discussions on the role of teacher as a reflective Practitioner</p> <p>Preparation of video lessons</p> <p>Demonstration on the preparation of</p>	<ul style="list-style-type: none"> <li>• CE - Peer Evaluation of 10 classes</li> <li>• Participation of students</li> <li>• Performance in practical sessions</li> <li>• Practicability of the journals</li> </ul>

		reflective journals	
		Preparation of reflective journal	

### Reference

BhashapadanavumBhodhanashastravum	Dr.SreeVrinda Nair N	DC Books Kottayam
BhashapadanavumSidhaanthangalum	Dr.SreeVrinda Nair N	DC Books Kottayam
Divaswapna	GijubhaiBhadeka	National Book Trust
EnganeMalayalattilBhogam	Baburaj PM	DC Books, Kottayam
Gadyarachana	Dr.CK Chandrasekharan Nair	Kerala Bhasha Institute
Gadyashilpam	CV VasudevaBhattathiri	Kerala Bhasha Institute
Kerala Panineeyam	AR RajarajaVarma	DC Books, Kottayam
KuttikalePadanathilSahayikkam	PK Abdul Hammed Karassery	DC Books, Kottayam
MalayalaBhashaBodhanam	CV VasudevaBhattathiri	Kerala Bhasha Institute
MalayalaBhashadyapanam	Dr.KSivarajan	Calicut University
MalayalaKavithapadhanamgal	K Sachidanandan	Mathrubhoomi Books
MalayalaSahithyaCharithram	Dr. KalpattaBlakrishnan	Kerala Bhasha Institute
MalayalaSahithyaCharithram	PK Parameswaran Nair	Sahithya Academy
MalayalaSahithyaNiroopanam	Dr. PanmanaRamachandran Nair	Current Books, Kottayam
MalayalaSahithyaVimarshanam	Dr. SukumarAzheekkode	DC Books, Kottayam
Mathrubhashabhodhanam:		
Micro teaching	Allen,D& Ryan, K	Adison Wesley, London
MumbilullaJeevitham	J Krishnamoorthi	DC Books, Kottayam
Nalla Malayalam	CV VasudevaBhattathiri	DC Books, Kottayam
NammudeBhasha	EMS Namboothiripad	Kerala Bhasha Institute
Padyapadhathisidhaantham	Dr. Ravisankhar S. Nair	Kerala Bhasha Institute
ParivarthanonmughaVidhyabhyabyasamGuru NithyachaithanyaYathi		NarayanaGurukulam, Varkala
PravanathakalumReethikalum.	Bindhu,C.M	Scorpio, Calicut

PrayogikaVyakaranam	Irinjayam Ravi	
PurogamanaVidyabhyaasachinthakal	PV Purushothaman	Kerala ShaasthrasaahityaParishad
Thettillatta Malayalam	Prof. PanmanaRamachandran Nair	DC Books, Kottayam
TirakkadhaRachana – KalayumSidhanthvum	Jose K Manuel	Current Books, Kottayam
Toto Chan	TetsukoKoriyoNagi	National Book Trust, Kerala
ShaasthrasaahityaParishad		
Tuition to Intuition	Dr. KN Anandan	Transcend, Malappuram
Ucharanamnannavan	Dr. VRPrabodhachandran	Kerala Bhasha Institute
VidhyabhyasathilViplavam	Osho	Silence, Kozhikkode
Vidyabhyaasachinthakal	AsisTharuvana	Olive, Kozhikkode
VidyabhyasaParivarthanattinoruAmugham		Kerala ShaasthrasaahityaParishad
VyakaranaMitham	SheshsgiriPrabhu	

#### Online Resources

- <http://ml.wikipedia.org>
- <https://www.facebook.com/groups/144983732246185>
- <https://www.facebook.com/groups/paribhasha>
- <http://www.keralasahityaakademi.org/>
- <http://malayalambloghelp.blogspot.com/>
- <http://www.topsite.com/best/malayalam>
- <http://malayalam.kerala.gov.in/index.php>
- [http://malayalaaikyavedi.blogspot.in/2015/04/blog-post\\_61.html](http://malayalaaikyavedi.blogspot.in/2015/04/blog-post_61.html)
- <http://www.facebook.com/pages/മലയാളപഠനബോധന-സഹായി/628705850559130?ref=hl>
- <http://bloghelpline.cyberjalakam.com/>
- <http://blogsahayi.blogspot.in/>

### EDU 0.13 : Emerging Trends and Practices in English Language Education

(Theoretical discourses – 60 & CE – 30 hours )

**Objectives of the Paper:**

- To familiarize with emerging trends in English language education
- Develop an awareness of strategies for assessment in English
- Explore possibilities of ICT- based material design for curriculum transaction.
- Identify ways of professionalizing Language Education in a
- Techno-pedagogic scenario.

**Content**

**Unit I: Modern Instructional Strategies in English Education**

**Unit II : Strategies of Assessment in English Education**

**Unit III: Material Design for Curriculum Transaction in e-platform**

**Unit IV: Reflective Practices**

**Unit 1 : Modern Instructional strategies in English education**

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. Student teacher familiarizes with evolving instructional strategies 2. Familiarizes with teacher role, Learner role, Instructional material and assessment practices in e-learning	<ul style="list-style-type: none"> <li>• Collaborative Learning and Co-operative Learning</li> <li>• Connectivism-learning through Aggregation, Remixing, Repurposing and Feeding forward</li> <li>• Metacognitive strategies in language learning</li> <li>• Webinars</li> <li>• Video conferencing</li> <li>• e-learning, Blended Learning, Virtual Learning</li> <li>• e-tutoring, Massive Open Online Courses</li> </ul>	Tasks involving cooperation and collaboration  Knowledge analysis  Re-creation  Textual reading and reflection	<ul style="list-style-type: none"> <li>• Completion and submission of tasks</li> <li>• Sharing/recreating resources</li> <li>• Improvement in performance</li> <li>• Compilation of knowledge garnered from Internet</li> <li>• Trainee created digital aids for online teaching</li> <li>• Participation in online learning</li> <li>• Submission of Lesson Plans that</li> </ul>

	(MOOC) <ul style="list-style-type: none"> <li>• Learning on the Cloud platform</li> <li>• Lesson Planning for modern instructional strategies</li> </ul>	Online access and participation Explores online sources Identification/preparation and use of digital resources for online learning Task completion Reflection and collaboration with peers Specimen Lesson Plan writing	fulfils essential criteria
--	--	---	----------------------------

### Unit II : Strategies of Assessment in English Education

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. Student teachers are introduced to assessment techniques and practices	<ul style="list-style-type: none"> <li>• Self-Reflection and Peer-Evaluation</li> <li>• Continuous and Comprehensive Evaluation (CCE)</li> <li>• Common Core Standards-European Framework</li> </ul>	Construction of test types Preparation of Question Paper	<ul style="list-style-type: none"> <li>• Course Book content-based test construction</li> </ul>

	<ul style="list-style-type: none"> <li>• Different types of tests-Purpose and mechanism</li> <li>• Criteria of a good test in English</li> <li>• Question forms- LOT &amp; HOT questions</li> <li>• Test types for LSRW</li> <li>• Construction and administration of:- Achievement &amp; Diagnostic Tests</li> <li>• Remedial Teaching</li> <li>• Formative and Summative Assessment</li> <li>• ICT integrated Assessment practices ; Assessment Rubrics in language testing;e-Portfolio</li> </ul>	Group and Pair work	
--	--	---------------------	--

### Unit III: Material Design for Curriculum Transaction in e-platform

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. Student teachers familiarizes with design and development of e-content materials	<ul style="list-style-type: none"> <li>• e-content design and development</li> <li>• e-content authoring</li> <li>• e-Padasala and Brihaspathi</li> <li>• NMEICT</li> <li>• Short Learning Objects (SLOs) and Reusable Learning Objects (RLOs)</li> </ul>	Intro lecture-cum demonstration on  Creation of e-content	<ul style="list-style-type: none"> <li>• Rubrics to check e-learning materials produced</li> </ul>



#### Unit IV: Reflective practices

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. Student teacher familiarizes with ways of improving performance through reflection 2. Develop ability to apply TQM strategies	<ul style="list-style-type: none"> <li>• -Teacher Performance Standards</li> <li>• -Rubrics for self assessment</li> <li>• -Self reflection</li> <li>• -Total Quality Management for Language Teachers</li> </ul>	Intro lecture on standards of achievement and performance  Self assessment  Reflects on own ability and skills  Preparation of plan of action for improving own performance	<ul style="list-style-type: none"> <li>• Pre and Post test during Practice Teaching aimed at improving performance based on standards</li> </ul>

#### References

##### Books:

- Boswood, Tim.(Ed.)(1997). New Ways of Using Computers inLanguage Teaching. TESOL.
- Continuous and Comprehensive Evaluation: Manual for teachers-Classes IX and X.(2010) CBSE, Delhi.
- Ferlazzo, Larry and Katie Hull Sypnieski. *Assessment and reflection with ELLs-and all students*.In The ESL/ELL Teacher's Survival Guide.
- Going Forward: Continuing Professional Development forEnglish Language Teachers in the UK. (2012) British Council.
- Guidelines for e-content development. (2007-2012) UGC, New Delhi.
- Lorenzo, George and John Ittelson.,(2005) *An overview of e-Portfolios* in Diana Oblinger (Ed.)Educause Learning Initiative-Advancing learning through IT Innovation.ELI Paper 1.
- Richards, Jack C. & David Bohlke. (2011)Creating EffectiveLanguage Lessons. Cambridge University Press. New York.
- UNESCO ICT Competency Framework for Teachers.

##### Journals:

- *Patterns of Engagement in Connectivist MOOCs*. Milligan, Colin Milligan (etal.) MERLOT Journal of Online Learning and Teaching. Vol. 9, No. 2, June 2013
- [http://jolt.merlot.org/vol9no2/milligan\\_0613.pdf](http://jolt.merlot.org/vol9no2/milligan_0613.pdf)
- *Self assessment through rubrics*. Heidi Andrade. Educational Leadership. Dec 2007-Jan 2008.65/4. P.60-63.
- *Using Metacognitive Strategies and Learning Styles to Create Self-Directed Learners* Steven V. Shannon..Institute for Learning Styles Journal. Volume 1, Fall 2008.
- <http://www.auburn.edu/~witteje/ilsrj/Journal%20Volumes/Fall%202008%20Volume%201%20PDFs/Metacognitive%20Strategies%20and%20Learning%20Styles.pdf>

#### **Online references:**

- Common European Framework of Reference for Languages: Learning, Teaching, Assessment. Language Policy Unit, Strasbourg.  
[http://www.coe.int/t/dg4/linguistic/source/framework\\_en.pdf](http://www.coe.int/t/dg4/linguistic/source/framework_en.pdf)
- Connecting Practice and Research: Metacognition Guide: <http://www.edugains.ca/resourcesLIT/CoreResources/MetaGuide-June4%202009.pdf>
- Ivanova, Vanya. Construction and evaluation of achievement tests in English. Guidelines for assessment of English Language Learners. Educational Testing Service.2009.<http://www.doe.in.gov/sites/default/files/assessment/constructed-response-rubric2-pointgr-3-12final-fall-2014.pdf>
- Ghirardini, Beatrice. E-learning methodologies: A Guide for designing and developing e-learning courses.FAO.:
- <http://www.fao.org/docrep/015/i2516e/i2516e.pdf>
- Perkin, Scott. Tutors' Guide to eTutoring. Northwest eTutoring Consortium.2009:  
<https://www.etutoring.org/resources/resourceDocs/eTutor%27s%20Guide.pdf>
- Planning Guide for Online and Blended Learning: Creating Models for Student Success. Michigan Virtual University  
[https://micourses.org/resources/pdf/toolkit/MVU\\_RPT\\_PlanningGuide.pdf](https://micourses.org/resources/pdf/toolkit/MVU_RPT_PlanningGuide.pdf)
- Powers, Donald E. The Case for a comprehensive four-skills assessment of English Language Proficiency. R & D Connections.No.14 May 2010.
- Successful Video Conferencing Guide: [http://www.desales.edu/docs/default-source/deit\\_documents/guide\\_to\\_videoconferencing.pdf?sfvrsn=8](http://www.desales.edu/docs/default-source/deit_documents/guide_to_videoconferencing.pdf?sfvrsn=8)
- Virtual Learning Program Rubric. Northeast Comprehensive Center.: <http://www.doe.mass.edu/odl/standards/VLPrubric.pdf>
- Useful sites for teachers:
- 55 Cloud Based eLearning Authoring Tools : <http://elearningindustry.com/the-ultimate-list-of-cloud-based-authoring-tools>
- The MOOC Guide: <https://sites.google.com/site/themoocguide/>

## EDU – 13.3 : EMERGING TRENDS AND PRACTICES IN HINDI EDUCATION

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

### Objectives

- To make the prospective teachers competent in understanding and applying various instructional strategies
- To get acquainted with the principles and practices of developing suitable testing mechanisms and feedback mechanisms
- To understand the diverse aspects of digital texts and e-content for transacting Hindi
- To become capable of designing and implementing online assessment tools and techniques
- To prepare the prospective teachers as reflective practitioner
- To generate a professional aspiration among prospective teachers by preparing for competitive / placement exams

### CONTENTS :

**Unit 1: Modern Instructional Strategies in Hindi Education**

**Unit 2: Strategies of Assessment in Hindi Education**

**Unit 3: Material Design for curriculum Transaction in E- platform**

**Unit 4: Teacher as a reflective practitioner**

### Unit 1 Modern Instructional Strategies in Hindi Education(16Hrs + 8 Hrs)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. Evolve modern instructional strategies 2. Evolve and utilize appropriate instructional strategies to satisfy the needs of different categories 3. Equip Student teachers to address the special needs of differently	<ul style="list-style-type: none"> <li>• Evolving instructional strategies for collaborative &amp; co-operative learning in small and medium groups, peer tutoring, innovative techniques, experiential learning, blended learning, self study, teaching thinking skills,</li> <li>• Meta cognitive strategies, Webinars, Learning on the cloud platform</li> </ul>	Collaborative learning Co-operative learning Constructivist approach of knowledge	<ul style="list-style-type: none"> <li>• Assessment of learning process and reflections</li> <li>• Assessment of students' progress</li> <li>• Assessment of learning materials prepared for differently abled students</li> </ul>

<p>abled children in Hindi language classroom</p>	<ul style="list-style-type: none"> <li>• Evolving instructional strategies for</li> <li>• High,Average and Low achievers in the heterogeneous classroom</li> <li>• Instructional strategies and teaching learning materials to address the special needs of differently abled children(CSWN-Children with special needs) in the language classroom</li> </ul>	<p>generation</p> <p>Comparative &amp; critical study on various methods and strategies</p> <p>Online learning</p> <p>Narrative expression</p> <p>Web search</p> <p>Adopting different strategies according to the level of students</p> <p>Developing different strategies for differently abled students</p>	
---	---	--	--

**Unit 2 Strategies of Assessment in Hindi Education ( 18 Hrs + 7 Hrs)**

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
<p>1. Get acquaint with different types of evaluation and assessment techniques</p>	<ul style="list-style-type: none"> <li>• Quantitative V/S Qualitative Assessment</li> <li>• Formative and Summative Evaluation, Scheme of Grading, Continuous and</li> </ul>	<p>Brain storming</p> <p>Meaningful verbal</p>	<ul style="list-style-type: none"> <li>• Quiz session</li> <li>• Portfolio Assessment</li> <li>• Rubrics</li> </ul>

<p>2. Become capable of designing and implementing various performance tests</p> <p>3. Familiarize with online assessment tools and techniques</p> <p>4. Get acquainted with the practices of feedback mechanisms</p> <p>5. Develop a professional aspiration for competitive / placement exams</p>	<p>Comprehensive Evaluation,different types of tests---Norm referenced test, Criterion referenced test</p> <ul style="list-style-type: none"> <li>• Diagnostic test, Achievement test: Design of the test/Blue Print</li> <li>• Performance test : assessment based on process indicators like listening comprehension, pronunciation,vocabulary test,reading test, handwriting assessment, creative writing,communication skill assessment</li> <li>• Online assessments, projects and their outputs</li> <li>• Techniques to reduce language errors: Language editing and summarization</li> <li>• Translation: Hindi to English,English to Hindi,Hindi to Malayalam,Malayalam to Hindi</li> <li>• Portfolio Assessment, Rubrics</li> <li>• Self reflection, Peer evaluation</li> <li>• Assessing student performance as feedback for Students progress --- Teacher's proficiency --- Parents</li> <li>• Opportunity for self reflection---Self Evaluation, Peer Evaluation and Teacher Evaluation of classroom practices,</li> <li>• preparation and application of context based data sheets</li> <li>• Competitive exams- Basic ideas of NET,</li> </ul>	<p>expression</p> <p>Activities for the development of language skills,communication skills</p> <p>Drill and Practise</p> <p>Projects</p> <p>Online learning</p> <p>Construction of test types</p> <p>Preparation of Question Paper</p>	<ul style="list-style-type: none"> <li>• Self reflection</li> <li>• Peer evaluation</li> <li>• Preparation of achievement and diagnostic test</li> <li>• Preparation of different types of tests</li> <li>• Diagnostic Test &amp; Achievement test</li> </ul>
---	---	---	---

	SET, K-TET, Proficiency courses offered by Kerala Hindi Prachara Sabha and Dakshin Bharath Hindi Prachara Sabha, Translation courses in Hindi		
--	---	--	--

**Unit 3 Material Design for Curriculum Transaction in E- Platform (12 Hrs + 8 Hrs)**

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
1. Generate curriculum transaction modes in teaching Hindi 2. Familiarizes with ways of designing digital texts and e-content 3. Develop skills in using websites, digital basic tools and softwares for modern instructional practices in Hindi	<ul style="list-style-type: none"> <li>Curriculum transaction: meaning and modes – Face to face mode and ICT enabled mode</li> <li>Experience with curriculum designs- designing of student-teacher generated digital texts, and e-content</li> <li>Adapting free downloadable digital resources in Hindi</li> <li>Use of basic tools and softwares in Hindi - Google transliteration (for Hindi typing), using Hindi online dictionaries – www.shabdKosh.com, collection of Hindi sites - <a href="http://dir.hinkhoj.com">http://dir.hinkhoj.com</a>, searching Wikis for collecting materials for classroom instruction</li> </ul>	Discussion Demonstration Self study Supervised study Self evaluation Observation Use of web-resources Creating Digital learning platforms	<ul style="list-style-type: none"> <li>Analysis of performance</li> <li>Evaluation of various curriculum designs</li> <li>Assessment of e-content script in Hindi</li> </ul>

**Unit 4 Teacher as a reflective practitioner (14 Hrs+ 6 Hrs)**

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
1. Capacitate the concept of teacher as a reflective practitioner 2. Become competent in practicing reflective strategies in instructional process	<ul style="list-style-type: none"> <li>• Teacher as a reflective practitioner – concept--modes and means of reflective practices in Hindi- designing and developing tools for reflection in Hindi</li> <li>• Reflective strategies – concept map, brain storming, portfolio writing, problem solving, blogs, online forums, Rubrics for self assessment,Self reflection ,Total Quality Management for Language Teachers</li> </ul>	Brain storming Self Assessment Online learning Group investigation Problem solving	<ul style="list-style-type: none"> <li>• Pre and post tests of practice teaching</li> <li>• Online assessment</li> <li>• Concept maps</li> <li>• Portfolio writing</li> <li>• Rubrics for self assessment</li> </ul>

## EDU – 13.4 : EMERGING TRENDS AND PRACTICES IN SANSKRIT EDUCATION.

[Theoretical discourses -60 hours+ CE – 30hours]

### Objectives :

- To familiarize and apply vocationally with Modern Instructional strategies in Sanskrit education
- To apply suitable strategies of assessment in Sanskrit Learning
- To design the material for curriculum transaction in E-platform
- To develop CPD

### CONTENTS :

- UNIT I: MODERN INSTRUCTIONAL STRATEGIES IN SANSKRIT EDUCATION.
- UNIT II STRATEGIES OF ASSESMENT IN SANSKRIT EDUCATION.
- UNIT III MATERIAL DESIGN FOR CURRICULAM TRANSACTION IN E-PLATFORM.
- UNIT IV CPD AND REFLECTIVE PRACTICES

### UNIT I: MODERN INSTRUCTIONAL STRATEGIES IN SANSKRIT EDUCATION.[15HOURS+7HOURS]

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To familiarize and apply vocationally with Modern Instructional strategies in Sanskrit education.	<ul style="list-style-type: none"><li>• -Collaborative learning and co-operative learning. Connectivism-Learning through Aggregation, Remixing, Repurposing, and feeding forward. Metacognitive strategies in language learning. Web seminars. Video conferencing. E-learning, Blended learning, Virtual learning. E-tutoring, Massive Open online courses[MOOC]</li><li>• Learning on the Cloud Platform. Lesson planning for the modern instructional strategies.</li></ul>	Demonstration. Lecture method. Group discussions. Debate. Demonstration. Presentation.	<ul style="list-style-type: none"><li>• Observation.</li><li>• Observation.</li><li>• Role performance.</li><li>• Participant observation.</li><li>• Observation.</li><li>• Performance.</li></ul>



**UNIT II STRATEGIES OF ASSESMENT IN SANSKRIT EDUCATION[14HOURS+9HOURS]**

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
<p>1. To apply suitable strategies of assessment in Sanskrit Learning.</p>	<ul style="list-style-type: none"> <li>• Self-Reflection and Peer-Evaluation. Continuous and comprehensive Evaluation[ CCE] .Different types of tests- Purpose and mechanism.</li> <li>• Criteria of a good test in Sanskrit. Question forms: - LOT and HOT question s. Test types of LSRW. Construction and</li> <li>• Administration of : Achievement and Diagnostic Tests. Remedial teaching. Formative and summative assessment.ICT Integrated Assessment Practices: Assessment Rubrics in language testing.E-Portfolio.</li> </ul>	<p>Demonstration. Lecture method. Discussions. Narrative expressions. Meaningful verbal expressions. Achievement test . Diagnostic test. Lecture method. Peer evaluation of classes.[five] Discussions. School internship- phase-1-10weeks.</p>	<ul style="list-style-type: none"> <li>• Observation.</li> <li>• Participant observation.</li> <li>• Individual Performance.</li> <li>• Observation and analysis.</li> <li>• Discuss and construct and finally evaluate.</li> <li>• Listening.</li> <li>• Observation.</li> <li>• Participant observation.</li> <li>• Individual assessment.</li> </ul>

**UNIT III MATERIAL DESIGN FOR CURRICULUM TRANSACTION IN E-PLATFORM.[18HOURS+8HOURS]**

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
1. To design the material for curriculum transaction in E-platform.	<ul style="list-style-type: none"> <li>E-content design and development. E-content authoring. E-Padasala and Brihaspathi. NMEICT.Short learning Objects [SLOs] and Reusable Learning Objects[RLOs]</li> </ul>	Meaningful verbal expressions.  Peer instruction.	<ul style="list-style-type: none"> <li>Participant observation.</li> <li>Observation.</li> </ul>

**UNIT IV: CPD AND REFLECTIVE PRACTICES[13HOURS+6HOURS]**

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
1. To develop CPD.	<ul style="list-style-type: none"> <li>Continuing Professional development[CPD].Teacher performance standards. Rubrics for self assessment.Self reflection.Total quality management for Language Teachers.</li> </ul>	Lecture cum Discussion.  Demonstration.  Discussions.  Presentation.	<ul style="list-style-type: none"> <li>Observation.</li> <li>Participant observation.</li> <li>Individual assessment.</li> <li>Test -5 marks.</li> </ul>

## EDU 13.5 EMERGING TRENDS AND PRACTICES IN ARABIC EDUCATION

(Theoretical Discourses. 60 hours. CE 30 hours)

### Objectives

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

- *Familiarize with the practices in modern instructional strategies*
- *Acquaint with the modern Assessment and evaluation strategies*
- *Acquire the ability to develop various assessment tools and apply it*
- *Explore the practices of curriculum transaction by applying e platforms*
- *Familiarizes with the modern trends and developments in Arabic language Education*
- *Equip and develop interest in teaching profession*

### Contents

**UNIT I. MODERN INSTRUCTIONAL STRATEGIES IN ARBIC LANGUAG EDUCATION**

**UNITII : STRATEGIES OF ASSESSMNT IN ARABIC LANGUAGE EDUCATION**

**UNIT III: MATERIAL DESIGN FOR CURRICULUM TRANSACTION IN E-PLATFORM**

**UNIT IV: TEACHER AS A REFLECTIVE PRACTITIONER**

### UNIT I. MODERN INSTRUCTIONAL STRATEGIES IN ARBIC LANGUAG EDUCATION

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. Familiarizes with the practices in Modern instructional strategies	<ul style="list-style-type: none"> <li>• Modern Strategies in language teaching &amp; learning:</li> <li>• Collaborative Learning &amp; Co-operative Learning</li> <li>• Workshop, Seminar, Symposia, Debate,</li> <li>• Video conferencing,</li> <li>• e-learning, Blended Learning, Virtual</li> </ul>	<ul style="list-style-type: none"> <li>Introductory Lecture</li> <li>Discussion</li> <li>Group Discussion</li> <li>Observation</li> </ul>	<ul style="list-style-type: none"> <li>• CE</li> <li>• Assignment</li> <li>• Seminar report</li> <li>• Class test</li> <li>• TE</li> </ul>

	<p>Learning,</p> <ul style="list-style-type: none"> <li>• e-tutoring, Discourse based teaching and learning.</li> <li>• Addressing Individual differences in teaching and learning:</li> <li>• Multiple level learning, Learning disabilities</li> <li>• Inclusive education : concept, need &amp; importance</li> <li>• CWSN(Children With Special Needs), Strategies of Teaching CWSN</li> </ul>	Narration	
--	--	-----------	--

### UNITII : STRATEGIES OF ASSESSMSNT IN ARABIC LANGUAGE EDUCATION

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
<ol style="list-style-type: none"> <li>1. Acquaints with modern Assessment and evaluation strategies</li> <li>2. Acquire the ability to develop various assessment tools and apply it</li> </ol>	<ul style="list-style-type: none"> <li>• Assessment / evaluation in teaching and learning :</li> <li>• Assessment of learner achievements</li> <li>• Objectives of assessment,Tools&amp; Types ; formative and summative evaluation</li> <li>• Continuous Evaluation, comprehensives evaluation, Continuous and comprehensive evaluation</li> <li>• Construction and administration of achievement tests</li> <li>• Diagnostic tests and Remedial teaching</li> <li>• Marking and grading, Grading indicators</li> </ul>	<p>Introductory Lecture</p> <p>Discussion</p> <p>Group Discussion</p> <p>Observation</p> <p>Narration</p>	<ul style="list-style-type: none"> <li>• CE</li> <li>• Class Test</li> <li>• Assignments</li> <li>• Reports</li> <li>• TE</li> </ul>

	<ul style="list-style-type: none"> <li>• Assessment using ICT</li> <li>• Development of online tests</li> <li>• Preparation and use online tests and its application</li> <li>• Student evaluation: Self evaluation, Peer evaluation</li> <li>• Preparation of scoring indicators for CE and CCE</li> <li>• Assessment Rubrics</li> </ul>		
--	---	--	--

### UNIT III: MATERIAL DESIGN FOR CURRICULUM TRANSACTION IN E-PLATFORM

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. <i>Explores the practices of curriculum transaction by applying e -platforms</i>	<ul style="list-style-type: none"> <li>• ICT enabled Language Teaching :</li> <li>• E-content design and development</li> <li>• E-content authoring</li> <li>• Online language teaching and learning</li> <li>• Online Language learning materials: language games, Online vocabulary games</li> <li>• Online grammar games</li> <li>• Audio-podcasting</li> </ul>	<p>Introductory Lecture</p> <p>Discussion</p> <p>Group Discussion</p> <p>Observation</p> <p>Narration</p>	<ul style="list-style-type: none"> <li>• CE</li> <li>• Reports</li> <li>• Workshop products</li> <li>• Assignment:</li> <li>• Soft copy</li> <li>• TE</li> </ul>

**UNIT IV: TEACHER AS A REFLECTIVE PRACTITIONER**

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. Equips the teacher and develop interest in teaching profession	<ul style="list-style-type: none"> <li>• Teacher ; Teaching Profession:</li> <li>• Professional Traits and competencies,</li> <li>• Professional Ethics.</li> <li>• Arabic Language Teacher : His varying roles, Qualities &amp; qualifications</li> <li>• Humanistic teacher attributes :</li> <li>• Temperance, Empathy, Academic Aristocracy, Commitment, Humor, Ethics, Reflection</li> <li>• Knowledge worker, Facilitator, Mentor, Social Engineer, &amp; guide</li> <li>• Reflective Practitioner,</li> <li>• <i>Teacher Development, Professional Development,</i></li> <li>• <i>Continuing professional Development</i></li> <li>• <i>Teacher Accountability</i></li> <li>• Rubrics for self assessment</li> </ul>	Introductory Lecture  Discussion  Group Discussion  Observation  Narration	<ul style="list-style-type: none"> <li>• CE</li> <li>• Assignment</li> <li>• Reports</li> <li>• TE</li> </ul>

**References:**

- Al Mawajjah Al FanniLiMudairsee al Lughal Al Arabiyya: Abdul Aleem Ibrahim; Dar al maarif, Al qahira
- Thaaleem al lugha al Arabiya lighairi al nathiqaenabiha : Makthab al tharbiyya al Arabiliduwal al Khaleej
- Thuruquthadrees al lugha al Arabiyyalimadaris al muthawassithawathanaiyya : HasanMullaUthman ; Dar alam al Kuthublithbaawannashshrwathouzeea, Riyadh, KSA
- Thaqnolojiya al Thaaleem; Al wasail al thaaleemiyawathaqniyyath al thaaluum: Dr. Muhammed Assam Tharbay , Dar Hammurabi lilnashriwathouzeea

- Asaleeb WaThuruqu al-Thadrees al Hadeesa : Dr. Muhammed Assam Tharbaya; Dar Hammurabi llnashriwathouzeea
- Providing teachers effective strategies for using technology tech trends: Brown B&Henscheid
- IstheeratheejyathwaMaharah al Tharees :Kamal al Jundi; Dar al Jumhooriyalilthibaa
- Wasaail al Ithisalwathaknologyafithaaleem :DrAbd al hafiz muhammedsalama ,Dar al Fjkar
- Al thadreeswaladad al Muallim: Dr.SAbdulrahmanqindeel Dar al Nashr al Duwali
- Murshid al Muallim: Richard D. C ; Aalam al Kutub al Qahira
- Al ThadreesAhdafuhuwasasuhuwaAsaleebuhuThaqweemuNathaijuhuwaThathbeeqathuhu: DrFikriHasanRayan, Aalm al kutub , al qahira
- MadkhalIlaTharbiya al muthamayyizeenawalMauhooben, Dar al fikarlialthibaawaNashr
- Thaqniyyath al thaaleem( Mafhoomuhawadouruha fi thahseeniamaliyyath al thaaleemwathaallum: BadarSalih
- Al tharbiyawathuruquthadrees: SalihabdulAzeez& Abdul Azeez Abdul Majeed; Dar al Maarif, Al Qahira
- KaifaThulqiDarsak: Yabhasu fi usooli al tharbiyathwathadrees, Dar al IlmlilMalayeen ,Bairut.
- Al Muwajjah al Amali li Mudarrisee al Lughah Al Arabiyya: AbidThoufeeq al Hashmi; Al Risala publishing House, Bairut
- Journal of Teacher Education, NCTE
- Open and Distance Learning-Global Challenge: TaloeseraHemalatha, New Delhi
- Computer Based Instruction; Methods & Development & Stanly R ; Prentice Hall
- Introduction to Educational Technology : Kulkarni S

## **EDU – 13.6 : Emerging Trends and Practices in Tamil Education.**

(Theoretical Discourses – 60 & CE – 30 hours )

### **Objectives :**

- To familiarize with emerging trends in Tamil language education
- Develop an awareness of strategies for assessment in Tamil
- Explore possibilities of ICT- based material design for curriculum transaction.
- Identify ways of professionalizing Language Education in a Techno-pedagogic scenario.

### **Contents:**

**Unit I: Modern Instructional Strategies in Tamil Education**

**Unit II : Strategies of Assessment in Tamil Education**

**Unit III: Material Design for Curriculum Transaction in e-platform**

**Unit IV: Reflective Practices**

### **Unit 1 : Modern Instructional strategies in Tamil education ( 25 hours )**

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
1. Student teacher familiarizes with evolving instructional strategies 2. Familiarizes with teacher role, Learner role, Instructional material and assessment practices in e-learning	<ul style="list-style-type: none"><li>• Collaborative Learning and Co-operative Learning</li><li>• Connectivism-learning through Aggregation, Remixing, Repurposing</li><li>• and Feeding forward</li><li>• Metacognitive strategies in language learning</li><li>• Webinars</li><li>• Video conferencing</li></ul>	Tasks involving cooperation and collaboration  Knowledge analysis Re-creation  Textual reading and reflection	<ul style="list-style-type: none"><li>• Completion and submission of tasks</li><li>• Sharing/recreating resources</li><li>• Improvement in performance</li><li>• Compilation of knowledge garnered from Internet</li><li>• Trainee created digital aids for online teaching</li><li>• Participation in online learning</li></ul>



	<ul style="list-style-type: none"> <li>• e-learning, Blended Learning, Virtual Learning</li> <li>• e-tutoring, Massive Open Online Courses (MOOC)</li> <li>• Lesson Planning for modern instructional strategies</li> </ul>	<p>Online access and participation</p> <p>Explores online sources</p> <p>Identification/preparation and use of digital resources for online learning</p> <p>Task completion</p> <p>Reflection and collaboration with peers</p> <p>Specimen Lesson Plan writing</p>	<ul style="list-style-type: none"> <li>• Submission of Lesson Plans that fulfils essential criteria</li> </ul>
--	---	--	--

**Unit II : Strategies of Assessment in Tamil Education ( 20 hours )**

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
1. Student teachers are introduced to assessment techniques and practices	<ul style="list-style-type: none"> <li>• Self-Reflection and Peer-Evaluation</li> <li>• Continuous and Comprehensive Evaluation (CCE)</li> <li>• Different types of tests-Purpose and mechanism</li> </ul>	<p>Construction of test types</p> <p>-Preparation of Question Paper</p>	<ul style="list-style-type: none"> <li>• Course Bookcontent-based test construction</li> </ul>

	<ul style="list-style-type: none"> <li>• -Criteria of a good test in Tamil</li> <li>• -Question forms- LOT &amp; HOT questions</li> <li>• - Test types for LSRW</li> <li>• -Construction and administration of:- Achievement &amp; Diagnostic Tests</li> <li>• -Remedial Teaching</li> <li>• -Formative and Summative Assessment</li> <li>• ICT integrated Assessment practices ;</li> </ul>	-Group and Pair work	
--	--	----------------------	--

**Unit III - Material Design for Curriculum Transaction in E- Platform ( 25 hours )**

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
<ol style="list-style-type: none"> <li>1. Generate curriculum transaction modes in teaching Tamil.</li> <li>2. Familiarizes with ways of designing digital texts and e-content</li> <li>3. Develop skills in using websites,digital basic tools and softwares for modern instructional practices in Tamil.</li> <li>4. Student teachers familiarizes with design and development of e-content materials</li> </ol>	<ul style="list-style-type: none"> <li>• Curriculum transaction: meaning and modes – Face to face mode and ICT enabled mode</li> <li>• Experience with curriculum designs- designing of student-teacher generated digital texts, and e-content</li> <li>• Adapting free downloadable digital resources in Tamil</li> <li>• Use of basic tools and softwares in Tamil - Google transliteration, using Tamil online dictionaries –searching Wikis for collecting materials for classroom instruction</li> <li>• e-content design and development</li> <li>• e-content authoring</li> <li>• e-Padasala and Brihaspathi</li> <li>• NMEICT</li> </ul>	<p>Discussion</p> <p>Demonstration</p> <p>Self study</p> <p>Supervised study</p> <p>Self evaluation</p> <p>Observation</p> <p>Use of web-resources</p> <p>Creating Digital learning platforms</p>	<ul style="list-style-type: none"> <li>• Analysis of performance</li> <li>• Evaluation of various curriculum designs</li> <li>• Assessment of e-content script in Hindi</li> </ul>

**Unit IV: Reflective practices ( 20 hours )**

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
1. Student teacher familiarizes with ways of improving performance through reflection 2. Develop ability to apply TQM strategies	<ul style="list-style-type: none"> <li>• Teacher Performance Standards</li> <li>• Rubrics for self assessment</li> <li>• Self reflection</li> <li>• Total Quality Management for Language Teachers</li> </ul>	Intro lecture on standards of achievement and performance Self assessment Reflects on own ability and skills Preparation of plan of action for improving own performance	<ul style="list-style-type: none"> <li>• Pre and Post test during Practice Teaching aimed at improving performance based on standards</li> </ul>

## EDU – 13.7 : EMERGING TRENDS AND PRACTICES IN MATHEMATICS EDUCATION

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

### Objectives:

- To strengthen the experience of adopting modern strategies and to undertake contextual challenges as a Mathematics Education professional
- To get a field-based understanding of theories and principles of pupil assessment and evaluation
- To identify the Entrepreneurial opportunities of futuristic significance associated with the Mathematics Education.
- To enrich the vision and capabilities of prospective mathematics teachers as reflective practitioners during and after the pre-service education.

### Contents:

**Unit 1: Modern Instructional Strategies in Mathematics Education**

**Unit 2: Strategies of Assessment in Mathematics Education**

**Unit 3: Material Design for Curriculum Transaction in e-platform**

**Unit 4: Teacher as a Reflective Practitioner**

### Unit I: MODERN INSTRUCTIONAL STRATEGIES IN MATHEMATICS EDUCATION (15 hours)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To familiarize modern instructional approaches for classroom learning 2. To acquaint with the concept of online learning and blended learning 3. To identify special education needs of slow learners, gifted and creative learners	<ul style="list-style-type: none"> <li>• Modern Strategies for teaching Mathematics</li> <li>• Small group and large group activity method cooperative learning and simulation</li> <li>• Online learning, blended learning</li> <li>• Brain based learning strategy</li> <li>• Education for students with special education needs slow learners, deprived learners, gifted and creative learners</li> </ul>	Meaningful verbal expression  Group discussion  Brain storming  Peer tutoring  Seminar	<ul style="list-style-type: none"> <li>• Questioning</li> <li>• On-task behaviour in class</li> <li>• Participant observation</li> </ul>

**Unit II: STRATEGIES OF ASSESSMENT IN MATHEMATICS EDUCATION (25 hours)**

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
<ol style="list-style-type: none"> <li>1. To make the learners aware of the importance of providing feedback</li> <li>2. To acquaint with the competitive tests in Mathematics at various levels</li> <li>3. To understand the construction of achievement and diagnostic test</li> <li>4. To familiarize with continuous and comprehensive evaluation and grading system</li> <li>5. To develop rubrics for CCE assessment, self reflection and peer evaluation</li> <li>6. To understand the concept of self reflection and peer evaluation</li> <li>7. To acquaint with online assessment and experience different practices</li> </ol>	<ul style="list-style-type: none"> <li>• Modern Assessment Strategies</li> <li>• Concept of Self Reflection and peer evaluation</li> <li>• Concept of CCE</li> <li>• Concept of Educational Evaluation</li> <li>• Different types of Evaluation</li> <li>• Concepts of Placement, formative Vs summative, product vs process, internal Vs external, diagnosis, Objective based evaluation,</li> <li>• Concept of Educational Diagnosis- Diagnostic test – Concept, steps of construction and Remedial teaching</li> <li>• Type of test items – Objective type, short answer type and Essay type</li> <li>• Concept of Achievement Test –, purpose, steps of construction</li> <li>• Distinction between Achievement and Diagnostic Test- characteristics of a good evaluation tool</li> <li>• Rubrics for assessment of assignments, projects, debates, seminars, discussion</li> <li>• Online assessment-meaning</li> <li>• Practicing of online tools.</li> </ul>	<p>Discussions</p> <p>Meaningful verbal expression</p> <p>Group discussion</p> <p>Preparation of rubrics</p> <p>Buzzer sessions</p> <p>Seminar</p>	<ul style="list-style-type: none"> <li>• Document analysis</li> <li>• Student reports</li> <li>• Questioning</li> <li>• Class test</li> <li>• Assessment of rubrics</li> <li>• Participant observation</li> <li>• Concept paper preparation</li> </ul>

**Unit III: MATERIAL DESIGN FOR CURRICULAUM TRANSACTION IN e-PLATFORM (14 hours)**

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
<ol style="list-style-type: none"> <li>To understand the concept of curriculum transaction material design</li> <li>To familiarize with various curriculum transaction materials using techno pedagogy</li> <li>To design and develop techno pedagogic curriculum transaction materials for learning Mathematics</li> <li>to understand and develop e-content for teaching various topics of Mathematics</li> <li>to explore the ways to develop an educational entrepreneurship</li> </ol>	<ul style="list-style-type: none"> <li>Techno Pedagogic curriculum transaction materials</li> <li>Digital texts-brief explanation-designing of student teacher generated digital text books by adapting freedownloadable digital resources in mathematics based on the principles of curriculum construction</li> <li>E-content development-steps</li> <li>Development of e-content material on any topic in Mathematics</li> <li>Educational entrepreneurship-career possibilities for trained graduate and post graduate students</li> </ul>	Demonstrations Illustrations Video clippings Web based illustrations Power point Presentations Assigned readings of e-text	<ul style="list-style-type: none"> <li>-Tests</li> <li>Questioning</li> <li>Participant observation</li> <li>Student reports</li> <li>Document analysis</li> </ul>

**Unit IV: TEACHER AS A REFLECTIVE PRACTITIONER (6 hours)**

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
<ol style="list-style-type: none"> <li>To understand the meaning of reflective practices</li> <li>To prepare tools for evaluation of reflective practices</li> </ol>	<ul style="list-style-type: none"> <li>Reflective Practice</li> <li>Concept of reflective practices</li> <li>Teacher as a reflective Practitioner</li> <li>Designing and development of tools for reflection by student teacher</li> </ul>	Narrative expression in small or medium groups Document analysis	<ul style="list-style-type: none"> <li>Online Evaluation of postings in blogs</li> <li>Reflective Journal Analysis</li> <li>Participant observation</li> <li>Test</li> </ul>

3. To make the students familiar with postings in blogs	<ul style="list-style-type: none"> <li>Posting of reflections during practice teaching in Blogs.</li> </ul>	Debate  Think Aloud	
---	---	---------------------------	--

### References

- Aggarwal, J.C. (2001). *Principles, Methods & Techniques of Teaching (2nd ed.)*. New Delhi: Vikas Publishing House Pvt. Ltd.
- Ediger, M. & Rao, D. B. (2000). *Teaching Mathematics Successfully*. New Delhi: Discovery Publishing House.
- James, A. (2005). *Teaching of Mathematics*. New Delhi: Neelkamal Publications, Pvt. Ltd.
- James, A. (2006). *Techniques of Teaching Mathematics*. New Delhi: Neelkamal Publications Pvt. Ltd.
- Joyce, B., Weil, M. & Calhoun, E. (2009). *Models of Teaching (8th ed.)*. New Delhi: PHI Learning Private Limited.
- Kulshreshtha, A. K. (2008). *Teaching of Mathematics*. Meerut: R.Lal Books Depot.
- Mustafa, M. (2005). *Teaching of Mathematics*. New Delhi: Deep and Deep Publications Pvt. Ltd.
- Orton, A. (2007). *Learning Mathematics (3rd ed.)*. London: Continuum
- Siddiqui, H.S. & Khan, M.S. (2004). *Models of Teaching - Theory and Research*. New Delhi: Ashish Publishing House.
- Siddiqui, M. H. (2007). *Teaching of Mathematics*. New Delhi: APH Publishing Corporation.
- Soman, K. *Ganithasasthrabodhanam*. Thiruvananthapuram: Kerala Bhasha Institute.
- Wadhwa, S. (2000). *Modern Methods of Teaching Mathematics*. New Delhi: Sarup & Sons.
- Rao, D.B. & Pushpalatha, D. (1995). *Achievement in Mathematics*. New Delhi: Discovery Publishing House.
- Mangal, S.K. *Teaching of Mathematics*. Ludhiana: Prakash Brothers Educational Publishers.
- Kumar, S. & Ratnalikar, D.N. (2003). *Teaching of Mathematics*. New Delhi: Anmol Publications Pvt. Ltd.

## EDU – 13.8 : EMERGING TRENDS AND PRACTICES IN PHYSICAL SCIENCE EDUCATION

(Theory - 60 hrs, CE - 30 hrs)

### Objectives:

- To strengthen the experience of adopting modern strategies and to undertake contextual challenges as a Science Education professional
- To get a field based understanding of the theories and principles of pupil assessment and evaluation
- To identify the Entrepreneurial opportunities of futuristic significance associated with the Physical Science education.
- To enrich the vision and capabilities of prospective science teachers as reflective practitioners during and after the pre-service education.

### Contents:

**Unit 1: Modern Instructional Strategies in Physical Science Education**

**Unit 2: Strategies of Assessment in Physical Science Education**

**Unit 3: Material Design for Curriculum Transaction in e-platform**

**Unit 4: Teacher as a Reflective Practitioner**

### Unit 1: Modern Instructional Strategies in Physical Science (20 + 6= 26 hrs)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To familiarize modern instructional approaches for classroom learning 2. To acquaint with the concept of online learning and blended learning 3. To identify special education needs of slow learners, fast learners, scientifically gifted and creative learners	<ul style="list-style-type: none"> <li>• Online learning, blended learning-Meaning and purpose</li> <li>• Brain based learning strategy</li> <li>• Experiential learning approach</li> <li>• Modern instructional approaches for learning- Jigsaw technique, circle learning, concept mapping, think-pair and share</li> <li>• Science education for students with special education needs- slow learners, fast learners, scientifically gifted and creative learners</li> </ul>	Meaningful verbal expression Group discussion Brain storming Peer tutoring Seminar	<ul style="list-style-type: none"> <li>• Questioning</li> <li>• On-task behaviour in class</li> <li>• Participant observation</li> </ul>



**Unit 2: Strategies of Assessment in Physical Science Education (30 +6 =36hrs)**

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
<ol style="list-style-type: none"> <li>1. To understand the construction of achievement and diagnostic test</li> <li>2. To familiarize with continuous and comprehensive evaluation and grading system</li> <li>3. To develop rubrics for CCE assessment, self reflection and peer evaluation</li> <li>4. To understand the concept of self reflection and peer evaluation</li> <li>5. To acquaint with online assessment and experience different practices</li> </ol>	<ul style="list-style-type: none"> <li>• Continuous and Comprehensive Evaluation, Grading system</li> <li>• Achievement test-construction</li> <li>• Diagnostic test-construction, remedial instruction</li> <li>• Assessment of thinking skills- critical and creative thinking- assessment of process skills in Physical Science</li> <li>• Concept of self reflection and peer evaluation-development and practice of rubrics</li> <li>• Rubrics for assessment of assignments, projects, debates, seminars, discussion</li> <li>• Online assessment-meaning Practicing of online tools. Downloading of online tools-online quiz maker Competitive/ placement examinations- GATE, GRE, Science Talent Search, Olympiad, Intel Science Programme, Google Science fair, KTET</li> </ul>	<p>Meaningful verbal expression</p> <p>Group discussion</p> <p>Preparation of rubrics</p> <p>Buzzer sessions</p> <p>Seminar</p>	<ul style="list-style-type: none"> <li>• Questioning</li> <li>• Class test</li> <li>• Read Aloud</li> <li>• Assessment of rubrics</li> <li>• Participant observation</li> <li>• Concept paper preparation</li> </ul>

**Unit 3: Material Design for Curriculum Transaction in e-platform (15 + 4 = 19hrs)**

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
<ol style="list-style-type: none"> <li>To understand the concept of curriculum transaction material design</li> <li>To familiarize with various curriculum transaction materials using techno pedagogy</li> <li>To design and develop techno pedagogic curriculum transaction materials for learning physical science</li> <li>To understand and develop e-content for teaching various topics of physical science</li> <li>To explore the ways to develop an educational entrepreneur in science education</li> </ol>	<ul style="list-style-type: none"> <li>Techno Pedagogic curriculum transaction materials- Digital texts-brief explanation-designing of digital texts</li> <li>E content development- steps</li> <li>Development of e-content material on any topic in Physical Science</li> <li>Entrepreneurship possibilities for trained human resources in science education</li> </ul>	Digital Modular Exposition Explicit teaching Collaborative designing sessions Individual / group presentation	<ul style="list-style-type: none"> <li>Rubric based assessment of individual performance</li> <li>Think Aloud Sessions</li> </ul>

**Unit 4: Teacher as a Reflective Practitioner (15 + 4 = 19 hrs)**

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
<ol style="list-style-type: none"> <li>To familiarize with reflective practices</li> <li>To be a reflective practitioner</li> </ol>	<ul style="list-style-type: none"> <li>Reflective practitioner-Meaning, modes and means of reflective practices- Models of reflective practices – Schon and Kolb</li> </ul>	Narrative expression in small or medium groups Document analysis	<ul style="list-style-type: none"> <li>Reflective Journal Analysis</li> <li>Participant observation</li> <li>Localised designing and development of tools of</li> </ul>

		Debate Think Aloud	reflection by the student teacher, postings of reflection in blogs and forums
--	--	-----------------------	---

**Reference:**

- Brown S. & Smith B. (1997): *Getting to Grips with Assessment.*, Birmingham, SEDA.
- Funda Ornek, Issa M. Saleh (Eds.) (2012): *Contemporary Science Teaching Approaches: Promoting Conceptual Understanding in Science: USA*, Information Age Publishing Group.
- Germaine L. Taggart (1998): *Rubrics: A Handbook for Construction and Use*: Virginia, Rowman & Littlefield Education.
- Habeshaw S., Gibbs G. & Habeshaw, T. (1993): *53 Interesting Ways to Assess your Students*: Trowbridge Frederick M. Hess (2006): *Educational Entrepreneurship: realities, challenges, possibilities*: Harvard, Harvard Education Press.
- Mariamma Mathew (2014): *Teaching science for biological and physical sciences*: NAS Publishers: Kerala
- Radha Mohan (2007): *Innovative Science Teaching*: New Delhi, Prentice Hall of India Pvt Ltd.
- Rena M. Palloff & Keith Pratt (2009): *Assessing the Online Learner*: San Francisco, Jossey-Bass.
- Tony Ghaye (2011): *Teaching and Learning Through Reflective Practice (Second Edition)*: New York, Rutledge.
- Brown G. (2001): *Assessment: A Guide for Lecturers*. Assessment Series:, York, LTSN.

## **EDU - 13.9 : EMERGING TRENDS & PRACTICES IN NATURAL SCIENCE EDUCATION**

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

### **OBJECTIVES:**

Enable the student teacher to:

- Prepare different types of assessment and evaluation tools in classroom teaching
- Familiarize latest teaching-learning techniques like jig-saw learning, m-learning, circle learning, etc.
- Equip in using online resources in teaching learning process.
- Observe the various aspects associated with teaching-learning process
- Identify the learning facilities especially in the smart class room, in the school & its implementation
- Observe online resources in teaching learning process individually or in small groups
- Meet the student's digital need and their interest in learning through multi-media
- Swot analysis through self reflection, peer evaluation & supervising teacher about their performance.
- Reflect the different views about the curriculum transaction
- Understand about advantages & disadvantages of reflective learning.

### **CONTENTS**

**Unit 1: Modern instructional strategies in Natural Science Education**

**Unit 2: Strategies of assessment in Natural Science Education**

**Unit 3: Material design for curriculum transaction in e- platform**

**Unit 4: Teacher as a reflective practitioner**

### **UNIT I - Modern instructional strategies in Natural Science Education. (Theory Hours-14)**

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
1. To understand various Modern instructional approaches / technique for Cooperative and Collaborative learning.	<ul style="list-style-type: none"><li>• An introduction to Modern instructional approaches / technique</li><li>• Cooperative and Collaborative learning.</li><li>• Issue based learning</li></ul>	Meaningful verbal Expression. Group discussion. Narrative expression.	<ul style="list-style-type: none"><li>• Participation in group</li><li>• Discussion.</li><li>• Questioning.</li><li>• On-task behavior in class.</li></ul>

<ol style="list-style-type: none"> <li>2. To understand about the</li> <li>3. Cooperative, Collaborative</li> <li>4. Strategies, Issue based learning, Problem based learning and Critical pedagogy.</li> <li>5. To develop skill in selecting appropriate instructional strategies to transact the content.</li> </ol>	<ul style="list-style-type: none"> <li>• Problem based learning.</li> <li>• Critical pedagogy</li> <li>• Conceptual analysis of Modern instructional approaches / technique for Cooperative and Collaborative learning.</li> <li>• Jigsaw Technique</li> <li>• Circle Learning</li> <li>• Think-Pair Share.</li> <li>• Blended Learning/ Hybrid learning.</li> <li>• Brain Based Learning.</li> </ul>	<p>Discussion sessions in small or Medium groups. Brain storming. Seminar. Reflective practices</p>	<ul style="list-style-type: none"> <li>• Tests.</li> <li>• Science dairy.</li> <li>• Daily reflective journal</li> <li>• Participant observation</li> </ul>
---	---	---	---

#### UNIT II ASSESMENT IN NATURAL SCIENCE EDUCATION (Theory hours-18)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
<ol style="list-style-type: none"> <li>1. To understand the different types of Evaluation and Assessment tools.</li> <li>2. To develop skill in the preparation of different types of schedules and matrix for assessing performance.</li> <li>3. To prepare different types of test items.</li> <li>4. To administer oral and open book examination.</li> <li>5. To develop a skill in constructing and administering Achievement test &amp; Diagnostic tests.</li> </ol>	<ul style="list-style-type: none"> <li>• 2.1 Objective based evaluation.</li> <li>• 2.2 Preparation and practice of Assessment &amp; Evaluation tools</li> <li>• 2.2.1 Preparation of Question Bank with different types of test items (HOT, LOT Questions),</li> <li>• 2.2.2 Preparation &amp; implementation of Achievement Test.</li> <li>• 2.2.3 Preparation &amp; implementation of Diagnostic tests &amp; Remedial Teaching.</li> <li>• 2.3 Modern Trends in Evaluation.</li> <li>• 2.3.1 Continuous comprehensive evaluation.</li> <li>• 2.3.2 Rubrics for assessing of Assignments,</li> </ul>	<p>Meaningful verbal expression Group discussion Narrative expression sessions in small or medium groups Reflective practices. Multimedia and interdisciplinary approach. Peer tutoring Assignments Rubrics designing.</p>	<ul style="list-style-type: none"> <li>• Performance assessment in group discussion</li> <li>• Assessment of Optional Note Book entries</li> <li>• Questioning</li> <li>• Tests</li> <li>• Peer evaluation</li> <li>• Portfolio assessment.</li> <li>• Different types of Schedules and matrix developed by student teachers for assessing performance.</li> <li>• Construction and administration</li> </ul>

6. To familiarize & understand about Modern Trends in Evaluation like Continuous comprehensive evaluation & Rubrics designing.	Projects, Debates, Seminars and Discussions. • 2.4 Reflection and feedback- Assessment of student's performance.	Question Bank.	of Achievement test & Diagnostic tests. • Rubrics designing. • Question Bank.
--	---	----------------	---

**UNIT III MATERIAL DESIGN FOR CURRICULUM TRANSACTION (Theory Hours-18)**

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
1. To develop a digital skills in compiling of online resources like ppt, video, broadcast for transacting High School Biology. 2. To equipping them in using online resources in teaching learning process. 3. To keep abreast with online resources in teaching learning process. 4. To develop a skill in script writing. 5. To understand about steps for E content generation.	<ul style="list-style-type: none"> <li>• 3.1 Compiling of online resources like ppt, video, broadcast for transacting High School Biology.</li> <li>• 3.2.1 An introduction to E content generation &amp; Steps for E content generation.</li> <li>• 3.2.2 E content generation for the select topics of high school Biology.</li> </ul>	Meaningful verbal expression Group discussion Narrative expression sessions in small or medium groups Reflective practices. Multimedia and interdisciplinary approach. Team teaching. Peer tutoring	<ul style="list-style-type: none"> <li>• Performance assessment in group discussion</li> <li>• Assessment of Optional Note Book entries</li> <li>• Questioning</li> <li>• Tests</li> <li>• Peer evaluation</li> <li>• Evaluating the script.</li> </ul>

**UNIT IV TEACHER AS A REFLECTIVE PRACTITIONER (Theory Hours-10)**

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To understand about definition & meaning of reflective practices in learning. 2. To understand about modes and means of reflective learning. 3. To suggest measures for modifying behaviours of student teachers 4. To get a feedback through the analytical review of peer teaching. 5. To understand about advantages & disadvantages of reflective learning.	<ul style="list-style-type: none"> <li>• <b>4.1 Reflective practices</b> – Definition &amp; Meaning of reflective practices in learning.</li> <li>• <b>4.2 Modes and means of reflective learning</b></li> <li>• Reflective learning journals</li> <li>• Peer &amp; self-assessment/debriefing</li> <li>• Critical incident diaries</li> <li>• Field work diaries</li> <li>• Personal development planners</li> <li>• Portfolio development</li> <li>• Collaborative inquiry</li> <li>• Problem based learning</li> <li>• <b>4.3 Advantages &amp; disadvantages of reflective learning</b></li> </ul>	Meaningful verbal expression Group discussion Narrative expression sessions in small or medium groups Reflective practices. Debate. PBL. Multimedia and interdisciplinary approach. Peer tutoring	<ul style="list-style-type: none"> <li>• Performance assessment in group discussion</li> <li>• Assessment of Optional Note Book entries</li> <li>• Questioning</li> <li>• Tests</li> <li>• Peer evaluation</li> <li>• Portfolio assessment.</li> </ul>

**References**

- Chao, Lee (ed.) (2012) *Cloud Computing for Teaching and Learning: Strategies for Design and Implementation*: Hershey, PA, IGI Global.
- Clark, R.C. and R.E. Mayer., (2002). *E.Learning and Science of instruction*, Pfeiffer, San Francisco.
- R.A. Sharma., (2009). *Information and Communication Technology in Teaching*, Lall Book Depot, Meerat.
- Jahitha Begum, Natesan, G, Sampath, (2011). *ICT in Teaching Learning*, Balaji offset, Delhi.
- Krishna Sagar, (2005). *ITCs and Teacher Training*, Tarun offset, Delhi.
- Hussain M. (2012). *E.Learning*, Srikrishna offset Pvt, Delhi
- Anshulkaushik., (2007). *Computer security – insiders view to Network forensics*, Khana book publishing company, Delhi
- Carl simmons, Claire Hawkins (2009). *Teaching ICT-Developing as a Reflective Secondary Teacher*, Sage South Asia education,.
- Majibulhussan., (2009). *Educational Evaluation*, A P H Publishing Corporation, New Delhi.

- Sidhu. K.S, (2005). New Approaches to Measurement and Evaluation, Sterling Publishing, Delhi.
- Robert M.Thorndike., (2011).Measurement and Evaluation in Psychology and Education. Sterling Publishing, Delhi.
- Mathew,T.K., and Molikutyy, T.M, (2006).Science Education- Theoretical Base of Teaching and Pedagogic Analysis, Rainbow Book Publishers, Kerala.
- JessyMathews., (2008).Teaching of Natural Science –Theory, Perspectives and Practices, Methodology of Teaching life sciences.



## **EDU - 13.10 : EMERGING TRENDS AND PRACTICES IN SOCIAL SCIENCE EDUCATION**

**(theoretical discourses-60 hours & CE – 30 hours)**

### **Objectives:**

- To identify and practice modern instructional strategies in Social Science.
- To get acquainted with the principles and practices of feedback mechanisms.
- To become capable of designing and implementing various performance tests.
- To inculcate a broad perspectives of individualized instruction
- To develop skills in preparing programmed instruction materials and modules
- To prepare the prospective teachers as reflective practitioner

### **CONTENTS :**

**Unit 1: Modern Instructional Strategies in Social Science Education**

**Unit 2: Strategies of Assessment in Social Science Education**

**Unit 3: Material Design for curriculum Transaction in e - platform**

**Unit 4: Teacher as a reflective practitioner**

### **Unit 1 Modern Instructional Strategies in Social Science Education**

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
1. To identify and practice modern instructional strategies in Social Science.	<ul style="list-style-type: none"><li>• Peer tutoring, multimedia and multi methodology strategies, Critical pedagogy, metacognition.</li><li>• Experiential learning, blended learning, self study, contract learning, problem based learning, teaching thinking skills.</li></ul>	<ul style="list-style-type: none"><li>• Online learning</li><li>• Demonstration</li><li>• Narrative expression</li><li>• Web search</li></ul>	<ul style="list-style-type: none"><li>• Use any e-resources to prepare any 4 learning materials</li></ul>

## References

- <http://www.bbk.ac.uk/linkinglondon/resources/>
- [http://en.wikipedia.org/wiki/Learn\\_management\\_system](http://en.wikipedia.org/wiki/Learn_management_system)<https://www.itschool.gov.in>
- [www.youtube.com/user/itsvicters](http://www.youtube.com/user/itsvicters)
- [en.wikipedia.org/wiki/IT@School\\_Project](http://en.wikipedia.org/wiki/IT@School_Project)
- [victers.itschool.gov.in/](http://victers.itschool.gov.in/)
- [www.youtube.com/user/itsvicters](http://www.youtube.com/user/itsvicters)
- Aggarwal, J.C. (2003). *Teaching of Social Studies: A Practical Approach*. Mumbai: Vikas Publishing House.
- Kumar, S.P.K & Noushad, P.P. (2009). *Social Studies in the Classroom: Trends and Methods*.
- Pathak R.P. (2012). *Teaching of social studies*. Pearson, Delhi
- Ehman & Patrick (1974). *Towards Effective Instruction in Social Studies*. USA: Houghton Mifflin.
- Dash, B. N. (1998). *Content cum Methods of Teaching Social Studies*. Ludhiana: Kalyani Publishers.
- Edigar, M. & Rao, B. (2003). *Teaching Social Studies Successfully*. New Delhi: Discovery Pub. House.
- Goleman, D. (1995). *Emotional Intelligence*. New York: McGraw Hill.
- Freire, Paulo. (1998). *Pedagogy of the Oppressed*. USA: Continuum Pub. Co.
- Fitchman & Silva (2003). *The Reflective Educators' Guide to Classroom Research*. California: Corwin Press, Inc.

## Unit 2 Strategies of Assessment in Social Science Education ( 8 Hrs + 4 Hrs)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To get acquainted with the principles and practices of feedback mechanisms. 2. To become capable of designing and implementing various performance tests.	<ul style="list-style-type: none"> <li>• Concept of Educational Evaluation</li> <li>• Quantitative V/S Qualitative Assessment</li> <li>• Diagnostic test &amp; Achievement test.</li> <li>• Portfolio Assessment, Rubrics</li> <li>• Self reflection, Peer evaluation - Assessing student performance as feedback for - Students progress -Teacher's proficiency - Parental involvement.</li> </ul>	<ul style="list-style-type: none"> <li>• Brain storming</li> <li>• Meaningful verbal expression</li> <li>• Online learning</li> </ul>	<ul style="list-style-type: none"> <li>• Peer evaluation during Practice teaching ( <b>CE- Edu.13</b>)</li> </ul>

## References

- <http://www.ero.govt.nz/National-Reports/The-Quality-of-Teach>
- <http://www.novisystems.com/Assessment-Software.aspx>
- <https://www.assessment.gatech.edu/wp-content/uploads/slides>
- Singh and Gopal (2004) Teaching Strategies. New Delhi: APH Publishing Corporation.
- Sue, Cowley (2006) A – Z of Teaching. New York: Brijbasi Art Press Ltd.
- Aggarwal, J.C. (2003). *Teaching of Social Studies: A Practical Approach*. Mumbai:Vikas Publishing House.
- Kumar, S.P.K &Noushad,P.P.(2009). *Social Studies in the Classroom: Trends andMethods*.
- Pathak R.P.(2012).Teaching of social studies. Pearson, Delhi
- Ehman& Patrick (1974). Towards Effective Instruction in Social Studies. USA: Houghton Miffln.
- Dash, B. N.(1998). Content cum Methods of Teaching Social Studies. Ludhiana: Kalyani Publishers

### Unit 3 Material Design for Curriculum Transaction in E- Platform ( 8 Hrs + 4 Hrs)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To inculcate a broad perspectives of individualized instruction 2. To develop skills in preparing programmed instruction materials and modules	<ul style="list-style-type: none"> <li>• Curriculum transaction: meaning and modes – Face to face mode and ICT enabled mode</li> <li>• Experience with curriculum designs-Design digital texts and e-content</li> <li>• Adapting free downloadable digital resources in Social Science</li> <li>• Websites surfing practices</li> </ul>	Discussion  Develop a e learning module/ e lesson to transact any one of the curricular aspect of Social Science	<ul style="list-style-type: none"> <li>• Assessment of e lesson.</li> </ul>

## References

- <http://www.airpower.au.af.mil/airchronicles/aureview/1975/se>
- Differentiating instruction: Collaborative planning and teaching for universally designed learning. SAGE: Thousand Oaks.Pvt. Ltd.

- Singh and Gopal (2004) Teaching Strategies. New Delhi: APH Publishing Corporation.
- Aggarwal, J.C. (2003). Teaching of Social Studies: A Practical Approach. Mumbai: Vikas Publishing House.
- Kumar, S.P.K & Noushad, P.P. (2009). Social Studies in the Classroom: Trends and Methods.
- Pathak R.P. (2012). Teaching of social studies. Pearson, Delhi
- Ehman & Patrick (1974). Towards Effective Instruction in Social Studies. USA: Houghton Mifflin.
- Dash, B. N. (1998). Content cum Methods of Teaching Social Studies. Ludhiana: Kalyani Publishers.

#### Unit 4 - Teacher as a reflective practitioner

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To prepare the prospective teachers as reflective practitioner	<ul style="list-style-type: none"> <li>• Social Science Teacher as a reflective practitioner – Concept</li> <li>• Reflective strategies – concept map, brain storming, journaling, portfolio writing, problem solving.</li> </ul>	Brain storming  Meaningful verbal expression  Arrange a reflective session after teaching practice or field visit or Camp activities	<ul style="list-style-type: none"> <li>• Reflective Journal (Practical)</li> <li>• Observing feedback session</li> </ul>

#### References

- <http://www.ero.govt.nz/National-Reports/The-Quality-of-Teach>
- <http://www.novisystems.com/Assessment-Software.aspx>
- <https://www.assessment.gatech.edu/wp-content/uploads/slides>
- Fitchman & Silva (2003). The Reflective Educators' Guide to Classroom Research. California: Corwin Press, Inc.

- Ehman& Patrick (1974). Towards Effective Instruction in Social Studies. USA: Houghton Mifflin.
- Edigar, M. &Rao, B. (2003).Teaching Social Studies Successfully. New Delhi: Discovery Pub.House.
- Singh and Gopal (2004) Teaching Strategies. New Delhi: APH Publishing Corporation.
- Sue, Cowley (2006) A – Z of Teaching. New York: Brijbasi Art Press Ltd.
- Innovative work: (CE- Edu.13) : Suggested programmes (Prepare any one):
- Develop a programmed learning material for learning any one of the units in Social Science
- Prepare a multimedia package comprising PPTs and video clippings including animations (downloadable from net), to transact any one unit in Social Science.
- Prepare a module to develop creativity and divergent thinking through the learning activities of a unit of your choice.
- Develop a script and prepare a short film on any one of the themes/ events selected from Social Science School curriculum.
- Reading and reflecting:(CE Edu.13)
- Read a book related to the teaching of Social Science in technological era and prepare a review.
- School internship: Phase 1- Practice teaching for 10 weeks ( 40 lessons)
- Suggested Readings
- Theodore Kaltsounis, (1979).Teaching Social Studies in Elementary School. USA: Prentice hall, Inc.
- Elizabeth Perrot, (1982). Effective Teaching. Singapore: Longman
- Alan Holmeister& Margaret Lukke, (1990).Research in to Practice. USA: Allyn and Bacon.
- Jerome Freiberg, H & Amy Driscoll. (1992). Universal Teaching Strategies. USA: Allyn and Bacon.
- Ronald W. Evans & David warren saxe. (1996). Hand book on Social Issues. New York: National council for Social Studies.
- Helen L Burz& Kit Marshall. (1998). Performance based Curriculum for Social studies. California: Corwin Press.
- Patricia L. Smith & Tillman J. Ragan. (1999). Instructional Design. New York: John Wiley & sons. Inc.
- George W. Gagnon & Michelle Colly. (2001).Designing for Learning- Six Elements in Constructivist Class rooms. California: Corwin Press.
- Susan Udelhofen. (2005). Keys to curriculum mapping. California: Corwin Press.
- Peter Taylor. (2006). How to design a Training Course. New York: VSO.
- Donald P. Kauchak& Paul D. Eggen. (2007). Learning and Teaching. USA: Pearson Education.
- Judith K. March & Karen H. Peters. (2008). Designing Instruction. California: Corwin Press.
- Robin Alexander. (2008). Essays on Pedagogy. USA: Routledge.
- Ian Philip. (2008). Teaching History. New Delhi: Sage Publications India Pvt. Ltd.

- Nicole Saginor. (2008). *Diagnostic Classroom Observation*. California: Corwin Press.
- Philip M. Anderson. (2009). *Pedagogy*. New York: Peter Lang Publishing, Inc.
- Arbind Kumar Jha. (2009). *Constructivist Epistemology and Pedagogy*. New Delhi: Atlantic.
- Don Skinner. (2010). *Effective Teaching and Learning in Practice*. London: Continuum International Publishing group.
- ValsaKoshy. (2011). *Action Research*. New Delhi: Sage Publications.
- Tony Ghaye. (2011). *Teaching and Learning through Reflective Practice*. London:Routledge.

## EDU- 13.11 : Emerging Trends and Practices in Geography Education

(Theoretical discourses – 60 & CE - 30 hours )

### Objectives :

- To identify and practice modern instructional strategies in Geography
- To get acquainted with the principles and practices of feed back mechanisms
- To aware of the designs and practical analysis of the modern evaluation techniques and strategies
- To inculcate a broad perspectives if individualised instructional skills and practices
- To prepare prospective teachers as reflective practitioners

### Contents :

Unit I. Modern Instructional Strategies in Geography Education

Unit 2 : Strategies of Assessment in Geography Education

Unit 3: Material Design for Curriculum transaction in e-platform

Unit 4: Teacher as a Reflective Practitioner

### Unit I – Modern Instructional Strategies in Geography Education (14 hrs + 6 hrs)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To identify and practice modern instructional strategies in Geography 2. To identify various modern instructional strategies for Geography education	<ul style="list-style-type: none"> <li>• Problem solving- steps, skills strategies</li> <li>• Problem based learning</li> <li>• Guided discovery / inquiry</li> <li>• Exploratory / Investigatory</li> <li>• Inductive/ Deductive</li> <li>• Multi-media/ Multi- methodology</li> </ul>	Discussion Demonstration Online learning Web search Internet Access	<ul style="list-style-type: none"> <li>• Use any e-resources to prepare four learning materials</li> <li>• Learning materials</li> <li>• Assignments</li> <li>• Reflections</li> </ul>

### Reference

- <http://www.bbk.ac.uk/inkinglondon/resurces/>
- [http://en.wikipedia.org/wiki/learning\\_management\\_systems](http://en.wikipedia.org/wiki/learning_management_systems)

- <http://www.itschool.gov.in>
- [en.wikipedia.org/wiki/IT@school-Project](http://en.wikipedia.org/wiki/IT@school-Project)
- [victersitschool.gov.in](http://victersitschool.gov.in)
- [www.youtube.com/user/itsvicters](http://www.youtube.com/user/itsvicters).
- Fitchman& Silva (2003) The Reflective Educator’s Guide to Classroom Research California
- AroraM.L (1979) Teaching of Geography, Prakash Brothers, Ludhiane
- VermaO.P, and Vedanayagam. E.G (1987) Teaching of Geography, Sterling Publishers Private Limited, New Delhi
- Singh and Gopal (2004) Teaching Strategies. New Delhi: APH Publishing corporation
- Gopill G.H (1966) Teaching of Geography, Macmillan, London
- Pathak.R.P (2012) Teaching of social studies. Pearson New Delhi
- Edigar.M&Rao.B (2003) Teaching social studies successfully. New Delhi: Discovery Publishing House

**Unit 2 Strategies of Assessment in Geography Education (17 Hrs + 8 Hrs)**

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To get acquainted with the principles and practices of feedback mechanisms 2. To become capable of designing and implementing various performance tests 3. To acquaint with modern evaluation techniques in geography	<ul style="list-style-type: none"> <li>• Evaluation- concept, purpose, techniques &amp; tools</li> <li>• Modern evaluation techniques CCE/ Grading</li> <li>• Self- reflection &amp; peer –evaluation and mental processes in learning</li> <li>• Achievement test and Diagnostic test- characteristics purpose, steps in construction, analysis of results &amp; remedial measures</li> <li>• Qualities of a good test</li> <li>• Types of Questions- merits/ demerits</li> <li>• Assessing students performance – purpose &amp; techniques</li> <li>• Classroom assessment- principles of feedback</li> </ul>	Discussion  Demonstration  Online learning  Brain storming  Meaningful verbal learning  Preparing achievement and diagnostic tests	<ul style="list-style-type: none"> <li>• Analysis of diagnostic and achievement tests (practical)</li> <li>• Peer evaluation (during practice teaching at least 10 lessons)</li> <li>• (CE-Edu.13)</li> </ul>



## Reference

- [http://www.ero.govt.nz/national Reports./](http://www.ero.govt.nz/national_Reports/) The quality of teaching
- <http://www.novisystems.com/assessment-software.aspx>
- Singh &Gopal (2004) Teaching strategies. New Delhi: APH Publishing corporation
- Sue, Cowley (2006) A- Z of teachin. New York: Brijibasi Art Press Ltd
- Verma O.P, and Vedanayagam. E.G (1987) Teaching of Geography, Sterling Publishers Private Limited, New Delhi
- Arora M.L (1979) Teaching of Geography, Prakash Brothers, Ludhiane
- Gopill G.H (1966) Teaching of Geography, Macmillan, London

### Unit 3 Material Design for curriculum transaction in e- plat from (17 Hrs + 8 Hrs)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To inculcate a broad perspective of individualised instruction 2. To develop skills in preparing instructional materials and modules	<ul style="list-style-type: none"> <li>• Curriculum transaction –meaning and various modes</li> <li>• Curriculum design – Digital texts and e-content</li> <li>• Virtual learning environment</li> <li>• Adapting free down loadable digital resources in Geography</li> </ul>	Discussion  Online learning  Develop a e- learning module or e-lesson in Geography  Web search	<ul style="list-style-type: none"> <li>• Assessment</li> <li>• <b>Internal test for units 1, 2, &amp; 3 (CE.Edu.13)</b></li> </ul>

## Reference

- <http://www.airpower.au.af.mil/airchronicles/aureview/1975/se.>
- Singh &Gopal (2004) Teaching strategies. New Delhi : APH Publishing Corporation
- Ehman& Patrick (1974) Towards Effective Instruction in Social Studies. USA : Houghton Miffln.
- Differentiating instruction :Collaborative Planning and teaching for universally designed learning. SAGE :ThousandOaks.Pvt.Ltd.

- Patricia.L, Smith &Tillman.J.Ragan,(1999) Instructional Design. Newyork :Johmwiley&Sons.Inc.
- George.W. Gagnon and Michelle colly (2001) Designing for Learning. California : Corwin Press.
- Susan Udelhofen (2005) Key to Curriculum mapping, California : Corwin Press.
- Verma O.P, and Vedanayagam. E.G (1987) Teaching of Geography, Sterling Publishers Private Limited, New Delhi
- Arora M.L (1979) Teaching of Geography, Prakash Brothers, Ludhiane
- Gopill G.H (1966) Teaching of Geography, Macmillan, London

#### Unit 4 Teacher as a Reflective Practitioner (14 hrs +6 Hrs)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To prepare the prospective teachers as reflective practitioners	<ul style="list-style-type: none"> <li>• Reflection in teaching and learning</li> <li>• Teachers as a reflective practitioner</li> <li>• Modes and means of reflective practices</li> <li>• Reflective strategies- portfolio writing, Brain storming, journaling etc</li> </ul>	Brainstorming  Meaningful verbal learning  Arranging reflective session during teaching practice/ field visits	<ul style="list-style-type: none"> <li>• Reflective journal (practical)</li> <li>• Observing reflective sessions</li> <li>• Collecting feed back</li> </ul>

#### Reference

- <http://www.assessment.gatech.edu/up-contnet/uploads.slides>
- Fitchman& Silva (2003). The Reflective Educators' Guide to classroom Research. California: Corwin Press, Inc.
- Singh &Gopal (2004) Teaching Strategies. New Delhi: APH Publishing corporation
- Verma O.P, and Vedanayagam. E.G (1987) Teaching of Geography, Sterling Publishers Private Limited, New Delhi
- Arora M.L (1979) Teaching of Geography, Prakash Brothers, Ludhiane
- Gopill G.H (1966) Teaching of Geography, Macmillan, London
- Tony Ghaye (2011) Teaching and Learning Through Reflective practice. London: Routeledge

## **EDU – 13.12 : EMERGING TRENDS AND PRACTICES IN COMMERCE EDUCATION**

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

### **Objectives :**

- To familiarize with the modern instructional strategies pertaining to teaching of commerce.
- To make the prospective teachers competent in applying various instructional strategies.
- To analyze the strategies in teaching book keeping and accountancy.
- To acquaint the trainees with the various assessment techniques.
- To become competent in developing suitable testing mechanisms.
- To develop the ability to use rubrics for quality assessment and become equipped for self and peer assessment.
- To become capable of designing and implementing various performance test.
- To get acquainted with the principles and practices of feedback mechanism.
- To create awareness about various competitive exams concerned with commerce and management.
- To understand the diverse aspects of digital texts and e-content in commerce fields.
- To prepare the prospective teachers as reflective practitioner.

### **CONTENTS :**

**Unit 1: Modern Instructional Strategies in Commerce Education**

**Unit 2: Strategies of Assessment in Commerce Education**

**Unit 3: Material Design for curriculum Transaction in e – platform**

**Unit 4: Teacher as a reflective practitioner**

### **Unit 1 Modern Instructional Strategies in Commerce Education ( 15 Hrs + 7 Hrs)**

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
1. To identify and practice modern instructional strategies in Commerce education.	<ul style="list-style-type: none"><li>• Experiential learning, blended learning, contract learning, problem based learning, teaching thinking skills, graphic organizer.</li></ul>	Online learning Demonstration	<ul style="list-style-type: none"><li>• Assessment of learning process and reflections</li><li>• Graphic organizers preparation</li></ul>

<p>2. To analyse the ways and strategies in which a teacher educand deals Children with Special Needs.</p>	<ul style="list-style-type: none"> <li>• Strategies in teaching book keeping and accountancy</li> <li>• Strategies to deal with Children with Special Needs (CWSN) - differently able, slow learner, gifted students in higher secondary classroom.</li> </ul>	<p>Narrative expression Web search</p>	<p>and analysis.</p>
--	--	--	----------------------

**Unit 2 Strategies of Assessment in Commerce Education (14 Hrs + 9 Hrs)**

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
<p>1. To get acquainted with the principles and practices of feedback mechanisms.</p> <p>2. To become capable of designing and implementing various assessment tools and techniques.</p> <p>3. To generate a professional aspiration among young world by preparing for competitive / placement exams.</p>	<ul style="list-style-type: none"> <li>• Quantitative V/S Qualitative Assessment</li> <li>• Diagnostic test, Achievement test, Performance test.</li> <li>• Portfolio Assessment, Rubrics</li> <li>• Self reflection, Peer evaluation</li> <li>• Assessing student performance as feedback for</li> <li>• Students progress</li> <li>• Teacher's proficiency</li> <li>• Parents</li> <li>• Competitive exams- Basic ideas of MAT, CA, CS, ICWAI</li> </ul>	<p>Brain storming</p> <p>Meaningful verbal expression</p> <p>Online learning</p> <p>Group investigation</p>	<ul style="list-style-type: none"> <li>• Quiz session</li> <li>• Portfolio Assessment</li> <li>• Rubrics</li> <li>• Self reflection</li> <li>• Diagnostic &amp; Achievement test (Practical)</li> </ul>

**Unit 3 Material Design for Curriculum Transaction in E- Platform (18 Hrs + 8 Hrs)**

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
1. To generate a curriculum transaction modes in teaching commerce. 2. To develop skills in using websites for analyzing modern instructional practices in commerce.	<ul style="list-style-type: none"> <li>Curriculum transaction: meaning and modes – Face to face mode and ICT enabled mode</li> <li>Experience with curriculum designs-Design digital texts and e-content</li> <li>Adapting free downloadable digital resources for curriculum transaction in commerce.</li> </ul>	Discussion Demonstration Self study Supervised study Self evaluation Observation	<ul style="list-style-type: none"> <li>Evaluation of various curriculum designs</li> <li>Assessment of e content script</li> <li>Analyzing educational blogs</li> <li>Assessment of e lesson.</li> </ul>

**Unit 4 -Teacher as a reflective practitioner (13 Hrs + 6 Hrs)**

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
1. To capacitate the spirit of teacher as a reflective practitioner. 2. To become competent in practicing reflective strategies in instructional process	<ul style="list-style-type: none"> <li>Commerce Teacher as a reflective practitioner – Concept</li> <li>Reflective strategies – concept map, brain storming, journaling, portfolio writing, problem solving.</li> </ul>	Brain storming Meaningful verbal expression Online learning Group investigation	<ul style="list-style-type: none"> <li>Online assessment</li> <li>Concept maps</li> <li>Portfolio writing</li> <li>Reflective Journal (Practical}</li> </ul>

## References

- Aggarwal, J.C. (1996) A Practical Approach. New Delhi :Vikas Publishing House Pvt. Ltd.
- Dymoke, Sue & Harrison, Jennifer (2008). Reflective teaching and learning. New Delhi: SAGE
- Jacqueline, Thousand S., Richard A. Villa & Ann, Nevin I. (2007). *Differentiating instruction: Collaborative planning and teaching for universally designed learning*. SAGE: Thousand Oaks. Pvt. Ltd.
- Singh and Gopal (2004) Teaching Strategies. New Delhi: APH Publishing Corporation.
- Sue, Cowley (2006) A – Z of Teaching. New York: Brijbasi Art Press Ltd.
- [http://en.wikipedia.org/wiki/Reflective\\_practice](http://en.wikipedia.org/wiki/Reflective_practice)
- <https://www.assessment.gatech.edu/wp-content/uploads/slides>
- [www.5learn.co/e-content-development](http://www.5learn.co/e-content-development)

## EDU – 13.13 : EMERGING TRENDS AND PRACTICES IN HOME SCIENCE EDUCATION

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

### Objectives:

- To strengthen the experience of adopting modern strategies and to undertake contextual challenges in Home Science education
- To get a field based understanding of theories and principles of pupil assessment and evaluation
- To identify the Entrepreneurial opportunities of futuristic significance associated with the Home Science education.
- To enrich the vision and capabilities of prospective science teachers as reflective practitioners during and after the pre-service education.

### Contents :

**Unit 1: Modern Instructional Strategies in Home Science Education**

**Unit 2: Strategies of Assessment in Home Science Education**

**Unit 3: Material Design for Curriculum Transaction in e-platform**

**Unit 4: Teacher as a Reflective Practitioner**

**Unit 1: Modern Instructional Strategies in Home Science (16 +8= 24 hrs)**

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To familiarize modern instructional approaches for classroom learning 2. To identify special education needs of slow learners, fast learners, scientifically gifted and creative learners	<ul style="list-style-type: none"> <li>• Online learning, blended learning-Meaning and purpose</li> <li>• Brain based learning strategy</li> <li>• Experiential learning approach, self study, Problem based learning,</li> <li>• Strategies for teaching entrepreneurship among Home science students</li> <li>• Strategies to deal with Children with Special Needs( CWSN) - differently able, slow learner, gifted students in heterogeneous classroom</li> </ul>	Group discussion  Brain storming  On line learning  Web search	<ul style="list-style-type: none"> <li>• On-task behaviour in class</li> <li>• Participant observation</li> <li>• Innovative work</li> </ul>

## References

- <http://www.bbk.ac.uk/linkinglondon/resources/>
- [http://en.wikipedia.org/wiki/Learn\\_management\\_system](http://en.wikipedia.org/wiki/Learn_management_system)<https://www.itschool.gov.in>

### Unit 2: Strategies of Assessment in Home Science Education (22 +10 =32hrs)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
<ol style="list-style-type: none"> <li>1. To familiarize with continuous and comprehensive evaluation and grading system</li> <li>2. To develop rubrics for CCE assessment, self reflection and peer evaluation</li> <li>3. To understand the concept of self reflection and peer evaluation</li> <li>4. To acquaint with online assessment and experience different practices</li> </ol>	<ul style="list-style-type: none"> <li>• Quantitative and qualitative assessment</li> <li>• Continuous and Comprehensive Evaluation, Grading system</li> <li>• Achievement test-construction</li> <li>• Diagnostic test-construction, remedial instruction</li> <li>• Assessment of thinking skills- critical and creative thinking- assessment of process skills in Home Science</li> <li>• Concept of self reflection and peer evaluation-development and practice of rubrics</li> <li>• Rubrics for assessment of assignments, projects, debates, seminars, discussion</li> <li>• Online assessment-meaning</li> <li>• Practicing of online tools. Downloading of online tools-online quiz maker</li> </ul>	<p>Group discussion</p> <p>Preparation of rubrics</p> <p>Buzzer sessions</p> <p>Seminar</p> <p>Collaborative learning</p>	<ul style="list-style-type: none"> <li>• Questioning</li> <li>• Class test</li> <li>• Assessment of rubrics</li> <li>• Participant observation</li> <li>• Portfolio assessment</li> <li>• Peer evaluation (10 classes)</li> </ul>



### Reference

- Aggarwal, J.C. (2001). Principles, Methods & Techniques of Teaching (2nded.). New Delhi: Vikas Publishing House Pvt. Ltd.
- <http://www.ero.govt.nz/National-Reports/The-Quality-of-Teach>
- <http://www.novisystems.com/Assessment-Software.aspx>
- <https://www.assessment.gatech.edu/wp-content/uploads/slides>

### Unit 3: Material Design for Curriculum Transaction in e-platform (12 + 6 = 18hrs)

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To understand the concept of curriculum transaction material design 2. To familiarize with various curriculum transaction materials using techno pedagogy 3. To design and develop techno pedagogic curriculum transaction materials for learning Home science 4. to explore the ways to develop an educational entrepreneur	<ul style="list-style-type: none"> <li>• Techno Pedagogic curriculum transaction materials- Digital texts-brief explanation-designing of digital texts</li> <li>• E content development- steps</li> <li>• Development of e-content material on any topic in Home Science</li> <li>• Educational entrepreneurship-career possibilities for trained graduate and post graduate students</li> </ul>	Digital Modular Exposition  Explicit teaching  Collaborative designing sessions  Individual / group presentation  Supervised study	<ul style="list-style-type: none"> <li>• Rubric based assessment of individual performance</li> </ul>

### References

- Habeshaw S., Gibbs G. & Habeshaw, T. (1993): 53 Interesting Ways to Assess your Students: Trowbridge Frederick M. Hess (2006): Educational Entrepreneurship: realities, challenges, possibilities: Harvard, Harvard Education Press.
- Radha Mohan (2007): Innovative Science Teaching: New Delhi, Prentice Hall of India Pvt Ltd.

**Unit 4: Teacher as a Reflective Practitioner (10 + 6 = 16 hrs)**

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To familiarize with reflective practices 2. To be a reflective practitioner	<ul style="list-style-type: none"> <li>• Reflective practitioner-Meaning, modes and means of reflective practices</li> <li>• designing and development of tools of reflection by the student teacher, postings of reflection in blogs and forums</li> </ul>	Narrative expression in small or medium groups  Online learning  Debate  Brain storming	<ul style="list-style-type: none"> <li>• Reflective Journal Analysis</li> <li>• Online assessment</li> <li>• Participant observation</li> </ul>

**Reference:**

- Brown S. & Smith B. (1997): *Getting to Grips with Assessment*. Birmingham, SEDA.
- Funda Ornek, Issa M. Saleh (Eds.) (2012): *Contemporary Science Teaching Approaches: Promoting Conceptual Understanding in Science*: USA, Information Age Publishing Group.
- Germaine L. Taggart (1998): *Rubrics: A Handbook for Construction and Use*: Virginia, Rowman & Littlefield Education.
- Habeshaw S., Gibbs G. & Habeshaw, T. (1993): *53 Interesting Ways to Assess your Students*: Trowbridge Frederick M. Hess (2006): *Educational Entrepreneurship: realities, challenges, possibilities*: Harvard, Harvard Education Press.
- Radha Mohan (2007): *Innovative Science Teaching*: New Delhi, Prentice Hall of India Pvt Ltd.
- Rena M. Palloff & Keith Pratt (2009): *Assessing the Online Learner*: San Francisco, Jossey-Bass.
- Tony Ghaye (2011): *Teaching and Learning Through Reflective Practice (Second Edition)*: New York, Rutledge.
- Brown G. (2001): *Assessment: A Guide for Lecturers*. Assessment Series, York, LTSN.

## **EDU – 301.2 : Health and Physical Education.**

**(1credits – 30 hours & 25 marks )**

### **Objectives**

- Acquire knowledge of the fundamentals of Health, Health Education and Physical fitness.
- Provide knowledge and understanding regarding the scientific basis and benefits of Physical activity.
- Develop right attitudes and habits for a healthy living in personal and community life.
- To impart knowledge regarding food and nutrition, first aid and the importance of posture.
- Develop awareness about various diseases and their prevention.
- Guiding the next generation to live with social commitment and obligations.

### **Contents**

- Unit – 1 Health & Health Education : meaning, scope and aims  
Unit – 2 Hygiene & Health Hazards  
Unit – 3 Food and Nutrition, Lifestyle Diseases, First aid and Posture  
Unit – 4 Yoga in schools.

### **Unit 1: Health & Health Education : meaning, scope and aims**

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
1. Acquire knowledge of the fundamentals of Health, Health Education and Physical fitness.	<ul style="list-style-type: none"><li>• Health &amp; Health Education – 4 hours</li><li>• Meaning, importance and factors affecting Health</li><li>• Significance, scope ,aims and objectives of Health Education</li></ul>	Meaningful verbal presentation	<ul style="list-style-type: none"><li>• Test</li></ul>

### Unit 2: Hygiene & Health Hazards

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. Develop right attitudes and habits for a healthy living in personal and community life. 2. Guiding the next generation to live with social commitment and obligations.	<ul style="list-style-type: none"> <li>• <b>Hygiene &amp; Health Hazards</b> – 6 hours</li> <li>• Personal and Community Hygiene</li> <li>• Smoking ,Alcoholism and Abuse of drugs</li> </ul>	Dramatization Presentations in small/medium groups	<ul style="list-style-type: none"> <li>• Evaluation of daily reflective behaviour</li> <li>• Test</li> </ul>

### Unit 3: Food and Nutrition, Lifestyle Diseases, First aid and Posture

Learning Outcome	Major concepts	Strategies & Approaches	Assessment
1. To impart knowledge regarding food and nutrition, first aid and the importance of posture. 2. Develop awareness about various lifestyle diseases and their prevention.	<ul style="list-style-type: none"> <li>• Food and Nutrition – 15 hours</li> <li>• Macro and Micro Nutrients</li> <li>• Balanced diet</li> <li>• Vitamin deficiency and related diseases</li> <li>• Mal nutrition</li> <li>• Diseases</li> <li>• Hypo kinetic /Lifestyle diseases and it's management</li> <li>• First Aid</li> <li>• Definition</li> <li>• Aims and Principles</li> <li>• Management of fracture, Dislocation, Wounds, Sprain, Strain, Cramp, Fainting,</li> </ul>	Narrative expressions  Practical sessions  Group activity  Dramatization  Personal profiles  Preparation of database Social survey	<ul style="list-style-type: none"> <li>• Debating and discussions</li> <li>• Test</li> <li>• Survey reports</li> <li>• Group presentation</li> <li>• Posture assessment Grid</li> </ul>

	Burns, etc. <ul style="list-style-type: none"> <li>• Posture</li> <li>• Congenital and acquired postural deformities</li> <li>• Remedial measures for acquired postural problems</li> </ul>		
--	--	--	--

**Unit 4: Yoga in schools.**

<b>Learning Outcome</b>	<b>Major concepts</b>	<b>Strategies &amp; Approaches</b>	<b>Assessment</b>
1. Understands the significance of yoga in school.	<ul style="list-style-type: none"> <li>• Yoga in Schools – 5 hours.</li> <li>• Catch them young and watch them grow.</li> <li>• Empowering children with yoga:</li> <li>• Need for practicing yoga</li> <li>• Diet and Hygiene</li> <li>• Pranayama (breath awareness)</li> <li>• Visualization (developing positive thoughts and building self-esteem.</li> <li>• Meditation.</li> </ul>	Narrative expressions  Practical sessions  Group activity  Dramatization  Personal profiles	<ul style="list-style-type: none"> <li>• Practice of yoga</li> <li>• Practical classes in schools</li> <li>• Discussions</li> <li>• Tests</li> <li>• Awareness campaign.</li> </ul>

**Guidelines for Practical work :**

- Personal Health & Nutrition Chart - 5 marks
- Record of Health Education -10 marks
- Practice of Yoga - 10 marks
- Practice teaching - 25 marks (conduct two classes in schools by preparing teaching-learning resources, one Yoga & one HE)

## **EDU – 301.3 : Art and Aesthetics Education.**

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

### **Contents :**

- Musical awareness-discussions- Folk songs, regional songs, national integration songs- ( collection and practice )
- Indian classical music- awareness of Musical instruments-Expert classes & Practice.
- Performing arts - Mudras and their meanings -of any one performing arts of Kerala, conducting demonstration classes-general Famous dance forms of India and their peculiarities and dancers.
- Familiarization of CCRT Cultural kit.

### **Practicals:**

- Prepare a report of music /performing arts/folk songs and patriotic songs/cultural tradition of India / Kerala, including collections. (Maximum 10 pages) – 10 marks
- Practice individual and group songs/ compose songs to teach the subject matter concerned - in a novel way. (5 marks)
- Preparation of an album on Art Education.(10 marks)

## **SEMESTER – IV**

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

### **Perspectives in Education/Core Subjects:**

**EDU-14 : Advanced Studies : Perspectives in Education.**

### **Curriculum and Pedagogic courses/Optional subjects:**

**EDU-15. 1-13 : Advanced Studies : Curriculum and Pedagogic Courses in .....Education.**

**CE – Preparation of MCQ test battery.**

## **EDU – 14 : ADVANCED STUDIES: PERSPECTIVES IN EDUCATION.**

### **Objectives**

To enable the student teachers:

- To synthesise acquired knowledge and skills for professional competency
- To equip student teachers to meet the challenges in classrooms
- To preserve the culture and values of nation
- To develop managerial skills to maintain an effective institutional climate
- To apply the modern trends in assessment and evaluation in education
- To integrate the knowledge of ICT in curriculum transaction

### **Content**

- Commissions and reports in Education- Kothari commission, NEP 1986,
- Professional ethics of teacher – with respect to students, institution and society- Eclectic tendencies in education
- Social issues and strategies to curb them with special reference to corruption, terrorism, violence against women and drug abuse- Significance of conscientisation programme
- Constitutional provisions related to education with special reference to Right to education act 2009.
- Learning in constructivist classrooms- theories of learning with special reference to constructivism- application of the theories of Piaget, Bruner and Vygotsky- classroom strategies and role of teacher. Comparison of behaviourism and constructivism.
- Inclusive education- strategies for inclusive classroom- Differently abled learners – characteristics- National policies and acts- special education and integrated education
- Adolescent issues- developmental needs and characteristics- psychosocial problems of secondary school students and remedial measures- guidance and counselling for adolescents- teacher as a counsellor
- Classroom management- role of Psychology, Philosophy and Technology in Assessment and evaluation in education- Current practices in assessment and evaluation –CCE- concept, need and relevance, Grading system- concept, types-absolute grading, direct grading and relative grading, merits and demerits. Tools of Assessment- tests, checklist, rating scale, cumulative record, questionnaire, inventory,



schedule, anecdotal record- concept, merits, demerits - relevance in the field of research. Characteristics of a good evaluation tool, Norm-referenced tests and Criterion-referenced tests.

- Basic statistics for analyzing/ assessment of data- Role and importance of statistics in analyzing assessment data, Population and Sample, Data, Types of Data- Primary & Secondary, Quantitative & Qualitative, Scales of Measurement-Nominal, Ordinal, Interval and Ratio scales. Classification of Data, Graphical Representation of Data- need and importance, Representing data using Graphs and Diagrams, Interpretation of graphical representations.
- Action Research- Need, scope, nature, characteristics, steps involved, advantages and limitations of action research, Integrating action research practices in different areas.
- Research hypothesis - Meaning, relevance, role/functions and types. Stating the research hypotheses, forms of hypothesis- null form, prediction form, question form and statement form.
- Sustainable development : Concept and meaning, need for sustainable development, measures to achieve sustainable development, role of teachers in creating awareness about sustainable development.
- Environmental ethics- Environmental laws and rights , articles related to environmental protection
- Eco-friendly life style – Changing life style and its impact on environment, measures of eco friendly living.
- Disaster management- Concept, steps and phases
- Entrepreneurial Education- Entrepreneurial opportunities for students
- First Aid –Definition, Aims and Principles, Management of fracture, Dislocation, Wounds, Sprain, Strain, Cramp,Fainting, Burns, Bleeding through nose, etc.
- Understanding Nutrition - -Macro and Micro Nutrients , Carbohydrates, Protein, Fat, Vitamins (Fat soluble and water soluble) , Minerals,Water&Fibre ,Balanced diet, Vitamin deficiency diseases
- Virtual classroom &E-learning- computer simulation, web based classrooms. Cloud computing. E-learning- concept, types- synchronous, asynchronous –merits, demerits. Learning management system.

## **EDU – 15.1 : ADVANCED STUDIES: CURRICULUM AND PEDAGOGIC COURSES IN MALAYALAM EDUCATION.**

### **Objectives**

- To familiarize with emerging areas in teaching and learning
- To develop an awareness of modern assessment strategies for Malayalam language teaching
- To explore avenues available for professional development

### **Unit -1 : Emerging areas in teaching and learning**

- M-learning in Malayalam language teaching
- Neuro linguistic Programming
- Resource Mapping
- Reflective Practice and teacher learning
- Learner centeredness and learner needs
- Online tutoring
- Social and community involvement activities
- Formal and Informal learning contexts
- Concept of e- resources and IT enabled instructional resources
- Modern instructional strategies and approaches for Malayalam instruction: Instructional strategies – Co operative and collaborative learning strategies, Scaffolding strategies, Virtual learning and Blended learning, Experiential learning
- Strategies to deal with Children with Special Needs (CWSN) - differently able,
- Strategies for slow learners, gifted students

### **Unit -2 Assessment**

- Focus on communicative properties of tests
- Quantitative and Qualitative Assessment in Malayalam language teaching - Diagnostic test, Achievement test, Performance test, Language Proficiency test, Reflective assessment - Portfolio Assessment, Rubrics, Self reflection, Peer evaluation, Teacher evaluation

- Evaluation—Formative and Summative, continuous and comprehensive evaluation
- Online tests and assessment, Computer adaptive tests

### **Unit -3 Research**

- Trends in research in language and Malayalam language learning
- Research in Internet-based teaching and learning
- Linguistics and language learning, multimodal learning.
- Educational entrepreneurship

### **Unit -4 Professional Development**

- Continuing professional development (CPD)-conceptual Analysis : **personal and professional qualities,**
- **empowerment, skills and practise**
- Online professional development courses
- TKT(Teaching Knowledge Test)
- Online Malayalam language proficiency test

## **EDU – 15.2 : Advanced Studies: Curriculum and Pedagogic Courses in English Education.**

### **Objectives:**

- To familiarize with emerging areas in teaching and learning
- Develop an awareness of modern assessment strategies for English.
- Identify recent research trends in ELT.
- Explore avenues available for own professional development.

### **Unit I: Emerging areas in teaching and learning**

- Modern trends-Whole language; Neurolinguistic Programming; Competency based language teaching;
- Post Methods era
- “there never was and never will be a method for all”-David Nunan.
- “apostmethod pedagogy must (a) facilitate the advancement of a context-sensitive language education; (b) rupture the reified role relationship between theorists and practitioners;(c) tap the sociopolitical consciousness that participants bring with them.” -B.Kumaravadivel.
- Online tutoring
- Reflective Practice and teacher learning.
- Learner centredness and learner needs.
- Diagnosis based on situational needs followed by treatment.
- Interlanguage development for second language learners.
- Criticism of published materials.
- Computer corpora
- Resource Mapping
- M-learning in ELT

### **Unit II: Assessment**

- Replacing testing philosophy that ‘one size fits all’ with different assessment batteries that cover both production and comprehension skills.
- Focus on communicative properties of tests.
- Tests and assessment both formative and summative

- Computer adaptive tests

### **Unit III: Research**

- Trends in research in language and language learning; learner corpora; Linguistics and language learning; multimodal learning
- Research in Internet-based teaching and learning- Blended learning; e-learning etc.

### **Unit IV: Professional Development**

- Perceiving Continuing Professional Development as a **planned, continuous and lifelong process whereby teachers try to develop their personal and professional qualities, and to improve their knowledge, skills and practice, leading to their empowerment, the improvement of their agency and the development of their organization and their pupils.**
- Online professional development courses
- TKT(Teaching Knowledge Test)
- CELTA(Certificate of Teaching English to Speakers of Other Languages)
- IELTS (International English Language Testing System)

## **EDU – 15.3 : ADVANCED STUDIES : CURRICULUM AND PEDAGOGIC COURSES IN HINDI EDUCATION.**

### **Objectives :**

- To familiarize with emerging areas in teaching and learning
- To develop an awareness of modern assessment strategies for Hindi language teaching
- To identify recent research trends in language teaching
- To explore avenues available for professional development

### **Unit -1 : Emerging areas in teaching and learning**

- Neuro linguistic Programming
- Online tutoring
- M-learning in Hindi language teaching
- Resource Mapping
- Reflective Practice and teacher learning
- Learner centeredness and learner needs
- Social and community involvement activities
- Formal and Informal learning contexts
- Concept of e- resources and IT enabled instructional resources
- Modern instructional strategies and approaches for Hindi instruction: Instructional strategies – Co operative and collaborative learning strategies, Scaffolding strategies, Virtual learning and Blended learning, Experiential learning
- Strategies to deal with Children with Special Needs (CWSN) - differently able,
- Strategies for slow learners, gifted students

### **Unit -2 Assessment**

- Focus on communicative properties of tests
- Quantitative and Qualitative Assessment in Hindi language teaching - Diagnostic test, Achievement test, Performance test, Language Proficiency test, Reflective assessment - Portfolio Assessment, Rubrics, Self reflection, Peer evaluation, Teacher evaluation
- Evaluation—Formative and Summative, continuous and comprehensive evaluation
- Online tests and assessment, Computer adaptive tests

### **Unit -3 Research**

- Trends in research in language and Hindi language learning
- Research in Internet-based teaching and learning
- Linguistics and language learning, multimodal learning
- Educational entrepreneurship

### **Unit -4 Professional Development**

- Continuing professional development (CPD)-conceptual Analysis : **personal and professional qualities, empowerment, skills and practise**
- Online professional development courses
- TKT(Teaching Knowledge Test)
- Online Hindi language proficiency test

## **EDU – 15.4 : ADVANCED STUDIES : CURRICULUM AND PEDAGOGIC COURSES IN SANSKRIT EDUCATION**

### **Objectives**

- To understand and develop the advanced studies in curriculum and pedagogic courses.
- To familiarize with emerging areas in teaching and learning.
- To develop an awareness of modern assessment strategies for Sanskrit.
- To identify recent research trends in Sanskrit.
- To identify the avenues available for own Professional Development.

### **UNIT-I EMERGING AREAS IN TEACHING AND LEARNING.**

- Neuro linguistic programming.
- On-line tutoring.
- M learning in Sanskrit language teaching.
- Resource mapping.
- Reflective practice and teacher learning.
- Learner centeredness and Learner needs.
- Social and community involvement activities.
- Formal and informal learning contexts.
- Concept of e-resources and IT enabled instructional resources.
- Modern instructional strategies and approaches for Sanskrit instruction .Instructional strategies-co operative and collaborative learning
- Strategies, scaffolding strategies, virtual learning and blended learning , experiential learning.
- Strategies to deal children with special needs (CWSN)-differently able.
- Strategies for slow learners , gifted students.

### **UNIT II ASSESMENT**

- Focus on communicative properties on tests
- Quantitative and qualitative assessment in Sanskrit language teaching , diagnostics test , achievement test, performance test ,



- Language proficiency test, reflective assessment – port folio assessment , rubrics ,self reflection , peer evaluation , teacher evaluation
- Evaluation – formative and summative – continues and comprehensive evaluation .
- Online test and assessment , computer adaptive test

### **UNIT III RESEARCH**

- Trends in research in language and Sanskrit language learning
- Research in internet based teaching and learning
- Linguistics and language learning , multi model learning.
- Educational entrepreneurship.

### **UNIT IV PROFESSIONAL DEVELOPMENT**

- Teacher transformation and Continuous Professional Development[CPD]
- Teacher Vision and Mission-Teacher and Professional growth-Ways and means of professional competency-Academic and Professional Qualification-Teacher as a reflective practitioner –Social Resource promote human attitudes-values-Nationalism.
- On line professional development courses.
- TKT [Teaching knowledge test]

## **EDU – 15.5 : ADVANCED STUDIES : CURRICULUM AND PEDAGOGIC COURSES IN ARABIC EDUCATION**

### **Objectives**

- To understand and develop the advanced studies in curriculum and pedagogic courses.
- To familiarize with emerging areas in teaching and learning.
- To develop an awareness of modern assessment strategies for Arabic.
- To identify recent research trends in Arabic
- To identify the avenues available for own Professional Development

### **Contents**

#### **Unit 1: Language and Language Learning:**

- Language and its functions
- Cultural context of Language
- Language Skills
- Language Acquisition
- Psychological Principles of Language Learning
- Aims & Objectives of Teaching Arabic Language

#### **Unit II : Methods & Strategies of Teaching Arabic Language:**

- Approach, Method & Techniques
- Traditional & Modern Methods
- Various Methods, Approaches & Techniques used in Arabic Language Teaching

#### **Unit III: Pedagogic Analysis :**

- Interdependence of Content Knowledge , Pedagogic Knowledge and Technological Knowledge
- Techno Pedagogic Content Knowledge Analysis(TPCKA)
- Arabic Curriculum in State Schools of Kerala

#### **Unit IV : Planning**

- Various Levels of Planning
- Steps Involved in Planning
- Use of various Resources and Aids in Teaching Arabic language

#### **Unit V : Assessing Learner Achievement**

- Tools and Types of Evaluation
- Formative and Summative Evaluation
- Developing achievements and diagnostic tests
- Assessment Rubrics

#### **References:**

- ThatweeruAdai -al Muallim; kifayathuthaaleemwathahleel al muthawasila : HashimUwaidha, Dar al Ilm al Malayeen , Labanan
- Al Muallim al Najih:, Dr. Abdullah al Amiri, Dar Usama li -nashirwathouzeea'
- Thaaaleemu al lugha al arabiyyabainanadriyyawathathbeeq: DrHasan Al Shahatha, Dar Misriyawallubnaniya
- MushkilathuthaaleemullughalArbiyya: Abbas Mahmood ; Dar alsaqafa, Qatar
- ThareeqathuThadreesiWastrateejjiyyathuhu: DrMuhammedMahmmmod al Haila, Dar Al Kitab Al Jamia, Al ain, UAE
- Al Mawajjah Al FanniLiMudarirsee al Lughal Al Arabiyya: Abdul Aleem Ibrahim; Dar al maarif, Al qahira
- Thaaaleem al lugha al Arabiya lighairi al nathiqeenabiha : Makthab al tharbiyya al Arabiliduwal al Khaleej
- Thuruquthadrees al lugha al Arabiyyalilmadaris al muthawassithawathanaiyya : HasanMullaUthman ; Dar alam al Kuthublithbaawannashshrwathouzeea, Riyadh, KSA
- Thaqlolojiya al Thaaaleem; Al wasail al thaaaleemiyyawathaqlniyyath al thaaluum: Dr. Muhammed Assam Tharbay , Dar Hammurabi lilynashriwathouzeea
- AsaleebWaThuruqu al-Thadrees al Hadeesa : Dr. Muhammed Assam Tharbaya; Dar Hammurabi lilynashriwathouzeea
- Providing teachers effective strategies for using technology techrends: Brown B&Henscheid
- The systematic Design for Instruction: Dick,W& L(1990)
- IstheeratheejiyyathwaMaharah al Tharees :Kamal al Jundi; Dar al Jumhooriyalilthibaa
- Wasaail al Ithisalwathaknologiayafithaaaleem :DrAbd al hafiz muhammedsalama ,Dar al Fjkar
- Al thadreeswaIadad al Muallim: Dr.SAbdulrahmanqindeel Dar al Nashr al Duwali

- Murshid al Muallim: Richard D. C ; Aalam al Kutub al Qahira
- Al Thadrees Ahdafuhu wasasuhu wa Asaleebuhu Thaqweemu Nathaijuhu wa Thathbeeqathuhu: Dr Fikri Hasan Rayan, Aalam al kutub , al qahira
- Madkhal ila Tharbiya al muthamayyizeen awal Mauhooben, Dar al fikar al thibaawa Nashr
- Thaqniyyath al thaaleem ( Mafhoomuhawadouruha fi thahseeniamaliyyath al thaaleemwathaallum: Badar Salih
- Kuthub al Mudariseen il madaris al thanawiyya: Majli al wilayalil buhuzuthabaviyyawathadreeb
- Al tharbiyawathuruquthadrees: Salih Abdul Azeez & Abdul Azeez Abdul Majeed; Dar al Maarif, Al Qahira
- Kaifa Thulqi Darsak: Yabhasu fi usooli al tharbiyathwathadrees, Dar al Ilmlil Malayeen , Bairut.
- Al Muwajjah al Amali li Mudariseen al Lughah Al Arabiyya: Abid Thoufeeq al Hashmi; Al Risala publishing House, Bairoot

## **EDU – 15.6 : ADVANCED STUDIES: CURRICULUM AND PEDAGOGIC COURSES IN TAMIL EDUCATION.**

### **Objectives**

- To familiarize with emerging areas in teaching and learning
- To develop an awareness of modern assessment strategies for Tamil language teaching
- To explore avenues available for professional development

### **Unit -1 : Emerging areas in teaching and learning**

- M-learning in Tamil language teaching
- Neuro linguistic Programming
- Resource Mapping
- Reflective Practice and teacher learning
- Learner centeredness and learner needs
- Online tutoring
- Social and community involvement activities
- Formal and Informal learning contexts
- Concept of e- resources and IT enabled instructional resources
- Modern instructional strategies and approaches for Malayalam instruction: Instructional strategies – Co operative and collaborative learning strategies, Scaffolding strategies, Virtual learning and Blended learning, Experiential learning
- Strategies to deal with Children with Special Needs (CWSN) - differently able, Strategies for slow learners, gifted students

### **Unit -2 Assessment**

- Focus on communicative properties of tests
- Quantitative and Qualitative Assessment in Tamil language teaching - Diagnostic test, Achievement test, Performance test, Language Proficiency test, Reflective assessment - Portfolio Assessment, Rubrics, Self reflection, Peer evaluation, Teacher evaluation
- Evaluation—Formative and Summative, continuous and comprehensive evaluation
- Online tests and assessment, Computer adaptive tests

### **Unit -3 Research**

- Trends in research in language and Tamil language learning
- Research in Internet-based teaching and learning
- Linguistics and language learning, multimodal learning.
- Educational entrepreneurship

### **Unit -4 Professional Development**

- Continuing professional development (CPD)-conceptual Analysis : **personal and professional qualities,empowerment, skills and practise**
- Online professional development courses
- TKT(Teaching Knowledge Test)
- Online Tamil language proficiency test

## **EDU – 15.7 :ADVANCED STUDIES : CURRICULUM AND PEDAGOGIC COURSES IN MATHEMATICS EDUCATION**

**OBJECTIVES :** Enable the student teachers to :

- understand the concept of teaching- learning process.
- understand and develop skill in selecting appropriate aims and objectives for teaching Mathematics.
- To identify the changing roles of the teacher
- familiarize and apply the instructional management strategies of teaching Mathematics.
- understand and apply online assessment and competency enhancement avenues.
- identify net working as a means of personal and professional growth
- develop skill in the preparation of different types of schedules and matrix for assessing performance.
- To understand and practice various models of teaching in classrooms
- prepare different types of test items for assessment.
- To understand and practice modern methods of assessment
- Develop skill in constructing and administering Achievement test & Diagnostic tests.
- familiarize & understand about Modern Trends in Evaluation like Continuous comprehensive evaluation& Rubrics designing
- To understand the meaning of reflective practices to prepare tools for evaluation of
- reflective practices

**CONTENTS:**

**Unit: I – Nature and Scope of Teaching and learning in Mathematics**

**Unit: II – Methods, Strategies and Models of Teaching**

**Unit: III – Curriculum and Modern Instructional Resources**

**Unit: IV – Modern Developments in Mathematics Education**

**UNIT: I – NATURE AND SCOPE OF TEACHING AND LEARNING IN MATHEMATICS**

- **History of mathematics -Contributions of great Mathematicians** (Pythagoras, Rene Descartes, C.F.Gauss, Aryabhata, -Bhaskaracharya, Brahmagupta, SreenivasaRamanuja and Newton,)
- **Values of learning Mathematics:** - Utilitarian, - Disciplinary, -Cultural, Aesthetic, Social, Moral, International etc.

- **Teacher as a professional:** Teacher qualities and competencies, Role of Teacher as a Knowledge manager, Facilitator, Scaffolder, Mentor, Social Engineer, Reflective practitioner
- **Changing concept of classroom environment:** conducive, learner friendly, inclusive and Virtual learning environment (VLE).
- **Teaching-Learning process:** Maxims of teaching. Phases of teaching, theories of learning(Piaget, Bruner, Gagne and Vygotsky)
- **Taxonomy of Instructional Objectives**-Origin, Bloom's Taxonomy of Instructional Objectives (1956) , Classification by NCERT, Technology Integrated Taxonomy –Peck & Wilson (1999) , Revised Blooms Taxonomy by Anderson and Krathwohl (2001).
- **Aims & Objectives of teaching Mathematics with respect to NCF (2005) and KCF.(2007)**

#### **UNIT: II – METHODS, STRATEGIES AND MODELS OF TEACHING**

- **Methods and approaches:** Inductive Deductive method, Analytic -Synthetic method, Laboratory method, Project method, Problem solving method, Heuristic approach
- **Techniques for individualising instruction:** Assignments, Homogeneous grouping, Supervised study, Drill work, Dalton plan,
- **Self Instructional Strategies** Programmed Instruction (Linear, branching), Modular Instruction and CMI
- **Models of Teaching:** Detailed study and practice on Concept Attainment Model , Inquiry Training Model, Constructivist Model, Discovery Model etc.
- **Motivation:**Role of motivation in mathematics learning. Techniques of motivating a mathematics classroom

#### **UNIT: III – CURRICULUM AND MODERN INSTRUCTIONAL RESOURCES**

- **New approaches to curriculum Construction:** Critical Pedagogy, Problem Based Learning, Constructivist Learning, Reflective learning, Experiential learning,
- **Modern trends in curriculum construction:**
- **Principles of Curriculum organisation**
- **Resources for Learning Mathematics:** Mathematics laboratory, Mathematics library, Mathematics Club, Informal learning contexts such as Mathematics exhibitions, Fair, Field Trip etc.
- **e- resources/ Digital resources**-CD, DVD, Websites, digital text books, Web 2.0 tools, Hot Potatoes, Teacher Tube, Edublog, Online Resources Learning management systems, m-learning, ICT and Multimedia in the teaching of Mathematics
- **Competitive Examinations for teachers** - KTET, NTET, TET.
- **Educational entrepreneurship** - Career possibilities for trained graduate and post graduate science students.



#### UNIT: IV – MODERN DEVELOPMENTS IN MATHEMATICS EDUCATION

- **Techno-pedagogy:** \_ Role of teacher as a techno-pedagogue, Concept of TPCK, Interrelationship of Content knowledge, pedagogic knowledge and technological knowledge , Scope and challenges of TPCK
- **Preparation Assessment tools:** Types of test items – Objective type, short answer type and Essay type tests: Achievement Test., -Diagnostic tests & Remedial Teaching.
- **Modern Trends in Evaluation.:** Objective based evaluation, Continuous comprehensive evaluation, Rubrics for assessing of Assignments, Projects, Debates, etc
- **Reflection and feedback:** \_ Concept of reflective practices, Teacher as a reflective Fractioned \_ Designing and development of tools for reflection by student teacher, Peer Evaluation
- **Research in Mathematics Education:** Types of Research, Thrust areas of researches in mathematics education

#### References

- Aggarwal, J.C. (2001). *Principles, Methods & Techniques of Teaching (2nd ed.)*. New Delhi: Vikas Publishing House Pvt. Ltd.
- Anderson, W. Lorin., and Krathwohl, David. R., *A Revision of Bloom's Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives Complete (Edn.)*
- Bode, H. B. (1927). *Modern educational theories*. New York: Macmillan.
- Ediger, M. & Rao, D. B. (2000). *Teaching Mathematics Successfully*. New Delhi: Discovery Publishing House.
- James, A. (2005). *Teaching of Mathematics*. New Delhi: Neelkamal Publications, Pvt. Ltd.
- James, A. (2006). *Techniques of Teaching Mathematics*. New Delhi: Neelkamal Publications Pvt. Ltd.
- Joyce, B., Weil, M. & Calhoun, E. (2009). *Models of Teaching ( 8th ed.)*. New Delhi: PHI Learning Private Limited.
- Kulshreshtha, A. K. (2008). *Teaching of Mathematics*. Meerut: R.Lall Books Depot.
- Mustafa, M. (2005). *Teaching of Mathematics*. New Delhi: Deep and Deep Publications Pvt. Ltd.
- Orton, A. (2007). *Learning Mathematics. (3rd ed.)*. London: Continuum
- Siddiqui, H.S. & Khan, M.S. (2004). *Models of Teaching - Theory and Research*. New Delhi: Ashish Publishing House.
- Siddiqui, M. H. (2007). *Teaching of Mathematics*. New Delhi: APH Publishing Corporation.
- Wadhwa, S. (2000). *Modern Methods of Teaching Mathematics*. New Delhi: Sarup & Sons.
- Rao, D.B. & Pushpalatha, D. (1995). *Achievement in Mathematics*. New Delhi: Discovery Publishing House.
- Mangal, S.K. *Teaching of Mathematics*. Ludhiana: Prakash Brothers Educational Publishers.
- Kumar, S. & Ratnalikar, D.N. (2003). *Teaching of Mathematics*. New Delhi: Anmol Publications Pvt. Ltd.

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

#### **INTERNET RESOURCES**

- [http://en.wikipedia.org/wiki/Technological\\_Pedagogical\\_Content\\_Knowledge](http://en.wikipedia.org/wiki/Technological_Pedagogical_Content_Knowledge)
- <http://www.citejournal.org/articles/v9i1general1.pdf>
- <http://www.ttf.edu.au/what-is-tpack/what-is-tpack.html>
- <http://www.csun.edu/science/biology/index.htm>
- [http://archive.org/stream/modernmethodsand029422mbp/modernmethodsand029422mbp\\_djvu.txt](http://archive.org/stream/modernmethodsand029422mbp/modernmethodsand029422mbp_djvu.txt)
- [http://books.google.com/books/about/Modern\\_Methods\\_and\\_Mater...](http://books.google.com/books/about/Modern_Methods_and_Mater...)
- <http://www.amazon.com/Teaching-Secondary-School-Science-Stra...>
- [http://www.ncert.nic.in/new\\_ncert/ncert/rightside/links/pdf/...](http://www.ncert.nic.in/new_ncert/ncert/rightside/links/pdf/...)
- [http://www.ncert.nic.in/right\\_side/links/pdf/framework/english/nf2005.pdf](http://www.ncert.nic.in/right_side/links/pdf/framework/english/nf2005.pdf)
- <http://www.ssamis.com/web/downloads/KCF%202007.pdf>
- [https://golem.ph.utexas.edu/.../new\\_teaching\\_method\\_improves\\_m.html](https://golem.ph.utexas.edu/.../new_teaching_method_improves_m.html)

## **EDU – 15.8 :ADVANCED STUDIES : CURRICULUM AND PEDAGOGIC COURSES IN PHYSICAL SCIENCE EDUCATION**

**(Theory hours-60, Marks -50, Related practical for CE-hours 30, marks –25)**

### **OBJECTIVES**

Enable the student teachers to

- Understand the concept of teaching- learning process.
- Understand and develop skill in selecting appropriate aims and objectives for teaching physical science.
- Familiarize and apply the instructional management strategies of teaching physical science.
- Understand and apply online assessment and competency enhancement avenues.
- Identify net working as a means of personal and professional growth
- Develop skill in the preparation of different types of schedules and matrix for assessing performance.
- Prepare different types of test items.
- Administer oral and open book examination.
- Develop a skill in constructing and administering achievement test & diagnostic tests.
- Familiarize & understand about Modern Trends in Evaluation like Continuous comprehensive evaluation& Rubrics designing

### **CONTENT**

- 1. Development of science education in India**
- 2. Networking in science classrooms**
- 3. Instructional Management – Traditional to digital - ICT and Multimedia as technology enhanced communication devises in the teaching of physical science**
- 4. Online Assessment And Competency Enhancement avenues**
- 5. Global trends in curriculum construction-** recent changes in curriculum construction, learner centered & participatory approaches.
- 5. Competitive examinations for secondary school students and science teachers**
- 6. Educational entrepreneurship – career possibilities of trained graduate and post graduate science students**
- 7. Assessment in Physical science Education.**
  - 7.1 Objective based evaluation.

7.2 Preparation Assessment & Evaluation tools

7.2.1 Preparation of Question Bank with different test items (HOT, LOT Questions),

7.2.2 Preparation of Achievement Test.

7.2.3 Preparation of Diagnostic tests & Remedial Teaching.

7.3 Modern Trends in Evaluation.

7.3.1 Continuous comprehensive evaluation.

7.3.2 Rubrics for assessing of Assignments, Projects, Debates, Seminars and Discussions.

**8. Reflective Reading and Teacher competencies.**

Relevance and scope of Reflective reading.

Teacher competencies for Science learning

Standards for Teacher Competence in Educational Assessment of Students.

## **EDU – 15.9 :ADVANCED STUDIES : CURRICULUM AND PEDAGOGIC COURSES IN NATURAL SCIENCE EDUCATION**

**OBJECTIVES** :Enable the student teachers to:

- Understand the concept of teaching- learning process.
- Understand and develop skill in selecting appropriate aims and objectives for teaching natural science.
- Develop skill in the preparation of various instructional materials for enhancing the effectiveness of instruction and remediation.
- Familiarize and apply the instructional management strategies of teaching natural science.
- Understand and apply online assessment and competency enhancement avenues.
- Identify net working as a means of personal and professional growth.
- Develop skill in the preparation of different types of schedules and matrix for assessing performance.
- Develop a skill in constructing and administering achievement test & diagnostic tests.
- Familiarize & understand about Modern Trends in Evaluation like Continuous comprehensive evaluation& Rubrics designing.

**CONTENTS:**

### **Multiple taxonomies of Instructional objectives**

- Origin, Bloom's Taxonomy of Instructional Objectives (1956) ,
- Classification by NCERT,
- Mc Cormack and Yagar's classification,
- Technology Integrated Taxonomy –Peck & Wilson (1999) ,
- Revised Blooms Taxonomy by Anderson and Krathwohl (2001).

### **Instructional Management: Traditional to Digital.**

- Teacher initiated methods- Lecture method, Lecture cum Demonstration, Biographical
- 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.
- ICT and Multimedia as technology enhanced communication devises in the teaching of life science
- Web 2.0 tools

- Networking- meaning and scope of Net working in science learning.
- M. learning
- Meaning and importance of planning, Types of planning – Year plan, Unit plan, lesson plan and Resource Unit
- lesson plans based on following approaches and Models of teaching- Herbartian Approach, Constructivist Approach, Concept attainment model(CAM), Inquiry Training Model(ITM), 5E Model
- Teaching skills –Definition, Core teaching skills, Components of teaching skills, Teaching skills specially required for Biology teacher.
- Curriculum-Meaning-functions and, Principles of curriculum construction,
- Approaches to curriculum organization’
- Critical analysis of the prevailing secondary school biology syllabus.
- Curriculum reforms in India(NCERT) & abroad (BSCS).

#### **Evolving Assessment Practices in Natural Sciences.**

- Reflection and feedback- Assessment of student’s performance.
- Objective based evaluation.
- Assessment &Evaluation tools
- Question Bank with different testitems (HOT, LOT Questions),
- Achievement Test.
- Diagnostic tests &Remedial Teaching.
- Modern Trends in Evaluation.
- Continuous comprehensive evaluation.
- Rubrics for assessing of Assignments, Projects, Debates, Seminars and Discussions.

#### **Reflective Reading and Teacher competencies.**

- Relevance and scope of Reflective reading.
- Teacher competencies for Science learning
- Standards for Teacher Competence in Educational Assessment of Students.

## REFERANCES

- Blooms, B.S. (Ed.), *Taxonomy of Educational Objectives: The Classification of Educational Goals, Handbook I: Cognitive Domain*, McKay, New York, 1956.
- 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., *A Text Book of Teaching Life Science*.
- Krathwohl, D.R., B.S.Bloom, and B.B.Maria, *Taxonomy of Educational Objectives, Hand Luhmann Book II: Affective Domain*, Mckay, New York, 1964.
- 33.NCF-2005, NCERT, New Delhi.
- NCERT, Government of India, *National Curriculum Framework(NCF)*,2000, New Delhi, 2000.
- NCERT, Government of India, *National Curriculum Framework(NCF)*,2005, New Delhi, 2005.
- R.A. Sharma ., (2009). *Information and Communication Technology in Teaching*, Lall Book Depot, Meerat.
- JahithaBegum ,Natesan, G,Sampath, (2011). *ICT in Teaching Learning* ,Balaji offset, Delhi.
- Krishna Sagar,(2005). *ITCs and Teacher Training*,Tarunoffset,Delhi.
- Hussain M. (2012). *E.Learning*, Srikrishna offset Pvt, Delhi
- Anshulkaushik., (2007). *Computer security – insiders view to Network forensics*, Khana book publishing company , Delhi
- Carl simmons, Claire Hawkins (2009). *Teaching ICT-Developing as a Reflective Secondary Teacher* , Sage South Asia education,
- Majibulhussan., (2009).*Educational Evaluation*, A P H Publishing Corporation,New Delhi.
- Sidhu. K.S, (2005). *New Approaches to Measurement and Evaluation*, Sterling Publishing, Delhi.
- Robert M.Thorndike., (2011).*Measurement and Evaluation in Psychology and Education*. Sterling Publishing, Delhi
- Norman herr(2007)*The Sourcebook for Teaching Science – Strategies, Activities, and Instructional Resources*, ISBN 978-07879-72981 [or 07879-72983] San Franciso,CA John Wiley/Jossey- Bass publishers.
- Government of India, *Report of Science Teaching in Secondary Schools, Committee on Plan Projects*, New Delhi, 1964.Hodson, D. and D.J. Reid, *Science for All Motives, Meaning and Implications*, School Science Review, pp. 653-661, 1988.

## INTERNET REFERENCES

- <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.91...>
- [http://en.wikipedia.org/wiki/Technological\\_Pedagogical\\_Conte...](http://en.wikipedia.org/wiki/Technological_Pedagogical_Conte...)
- <http://www.amazon.com/books/dp/0805863567>

- <http://www.csun.edu/science/biology/index.htm>
- [http://archive.org/stream/modernmethodsand029422mbp/modernmethodsand029422mbp\\_djvu.txt](http://archive.org/stream/modernmethodsand029422mbp/modernmethodsand029422mbp_djvu.txt)
- [http://\*\*books\*\*.google.com/\*\*books\*\*/about/Modern\\_\*\*Methods\*\*\\_and\\_Mater...](http://books.google.com/books/about/Modern_Methods_and_Mater...)



## **EDU – 15.10 : Advanced Studies : Curriculum and Pedagogic Courses in Social Science Education.**

### **Contents ;**

- **Social Science teaching in digital era-** need and significance of technological changes in teaching learning process
- **Virtual learning and Blended learning in Social Science-** Scope of virtual learning in Social science and the nature and scope of Blended learning in the present learning environment
- **Behaviourist and constructivist approaches in teaching Social Science-** how the approaches differ in planning and transactional modalities.
- **Global trends in curriculum construction-** recent changes in curriculum construction, learner centered & participatory approaches.
- **Innovative techniques and strategies of teaching Social Science-** modern instructional strategies with constructivist approaches and technological advancement
- **Need of research in teaching learning process-** Action research and its outcomes, recent research findings in the teaching learning process of Social Science
- **Role of Social science in National and international perspective-** Challenges to Nationalism, need and significance of international understandings, role of Social Science teaching to promote National and International perspectives.
- **Comparison of Community resources and e-resources-** important community resource items and e-resources, comparison of its availability and utilization in class room situation
- **Trends and developments in Evaluation-** modern trends in evaluation, CCE, fixing of rubrics and the scope of grading.

## **EDU – 15.11 : Advanced Studies : Curriculum and Pedagogic Courses in Geography Education.**

**Objectives :** To enable the student-teacher to :

- Understand the concept of teaching- learning process.
- Develop skill in the preparation of various instructional materials for enhancing the effectiveness of instruction and remediation.
- Understand and develop skill in selecting appropriate aims and objectives for teaching the subject.
- Familiarize and apply the instructional management strategies of teaching geography.
- Understand and apply online assessment and competency enhancement avenues.
- Identify net working as a means of personal and professional growth.
- Develop skill in the preparation of different types of schedules and matrix for assessing performance.
- Develop a skill in constructing and administering achievement test & diagnostic tests.
- Familiarize & understand about Modern Trends in Evaluation like Continuous comprehensive evaluation & Rubrics designing

**Contents ;**

- **Teaching of Geography in the digital era-** need and significance of technological changes in teaching learning process
- **Virtual learning and Blended learning in Geography /Social Sciences-** Scope of virtual learning in Social science and the nature and scope of Blended learning in the present learning environment
- **Behaviourist and constructivist approaches in teaching of Geography-** how the approaches differ in planning and transactional modalities.
- **Global trends in curriculum construction-** recent changes in curriculum construction, learner centered & participatory approaches.
- **Innovative techniques and strategies of teaching Geography-** modern instructional strategies with constructivist approaches and technological advancement
- **Need of research in teaching learning process-** Action research and its outcomes, recent research findings in the teaching learning process of Social Science
- **Role of Social sciences in the National and international perspective-** Challenges to Nationalism, need and significance of international understandings, role of teaching of Social Sciences in promoting National and International integration.
- **Comparison of Community resources and e-resources-** important community resource items and e-resources, comparison of its availability, sources and utilization in class room situation
- **Trends and developments in Evaluation-** modern trends in evaluation, CCE, fixing of rubrics and the scope of grading.

**(References : Semester I, II & III )**

## **EDU – 15.12 : ADVANCED STUDIES: CURRICULUM AND PEDAGOGIC COURSES IN COMMERCE EDUCATION.**

### **Objectives :**

- To mould the prospective teacher educators to uphold the professional spirit in diverse angles.
- To familiarize with the modern instructional strategies pertaining to teaching of commerce.
- To make the prospective teachers in commerce as competent in applying various instructional strategies and approaches.
- To get acquainted with modern principles and trends in the designing and organization of commerce curriculum.
- To generate a broad perspectives of e-resources in instructional practices and to develop skill in retrieving and transacting commerce curriculum through e-resources.
- To analyze the global trends in commerce education through comparison between India with other countries.
- To get acquainted with the principles and practices of feedback mechanisms and to become capable of designing and implementing various assessment tools and techniques.

### **CONTENTS :**

**Unit 1: Teaching of commerce in technological era**

**Unit 2: Modern instructional strategies, models and approaches for commerce education**

**Unit 3: Curriculum Designing and Modern Instructional Resources**

**Unit 4 Global Trends and Assessment in Commerce Education**

### **Unit 1: Teaching of commerce in modern era.**

- Teacher, Teacher as professional; Continuing Professional Development (CPD), Teacher responsibilities; multifarious roles: facilitator, scaffolder, mentor, social engineer, counsellor, reflective practitioner and digital migrant.
- Scope of commerce in nation's prosperity, Modernization of commerce through technological advancement and LPG.
- Values attained through commerce education.

**Unit 2: Modern instructional strategies, models and approaches for commerce education.**

- Instructional strategies – Co operative learning strategies, Collaborative learning strategies, Scaffolding strategies, Virtual learning and Blended learning, Experiential learning, blended learning, contract learning, problem based learning, teaching thinking skills, graphic organizer. Strategies to deal with Children with Special Needs (CWSN) - differently able, slow learner, gifted students in higher secondary classroom.
- Approaches of teaching book keeping and accountancy including computerized accounting.
- Models of teaching – Introduction, Operational Heart, Different families - Concept Attainment Model, Inquiry Training Model, Group Investigation Model, Cognitive Apprenticeship Model.

**Unit 3: Curriculum Designing and Modern Instructional Resources.**

- Curriculum – Concept, Principles of designing commerce curriculum, Global trends in designing commerce curriculum, Brief outline about NCF (2005) KCF (2007) and its relevance in vocational education.
- Curriculum transaction: meaning and modes – Face to face mode and ICT enabled mode, Experience with curriculum designs-Design digital texts and e-content development.
- Concept of e- resources and IT enabled instructional resources, Educational blogs, e-journals, pod casting, e-learning, m- learning, web based learning, learning management system (LMS) in teaching learning of commerce education.

**Unit 4: Global Trends and Assessment in Commerce Education.**

- Global trends in commerce education, Commerce education with India and USA, Entrepreneurship Education – India V/S Japan. Research Trends in Commerce Education, Analysis of Research outcomes in Commerce education both teaching and learning.
- Inter relationship between Technology, Pedagogy and Content, Teacher as Techno-Pedagogue, Scope and purpose of Techno-Pedagogic Content Knowledge Analysis.
- Quantitative and Qualitative Assessment in Commerce education - Diagnostic test, Achievement test, Performance test, Reflective assessment - Portfolio Assessment, Rubrics, Self reflection, Peer evaluation.

## **EDU – 15.13 :ADVANCED STUDIES : CURRICULUM AND PEDAGOGIC COURSES IN HOME SCIENCE EDUCATION**

**OBJECTIVES** :Enable the student teachers to:

- Understand the concept of teaching- learning process.
- 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.
- Understand and apply online assessment and competency enhancement avenues.
- Identify net working as a means of personal and professional growth
- Develop skill in the preparation of different types of schedules and matrix for assessing performance.
- Develop a skill in constructing and administering achievement test & diagnostic tests.
- Familiarize & understand about Modern Trends in Evaluation like Continuous comprehensive evaluation& Rubrics designing

**CONTENTS :**

### **Multiple taxonomies of Instructional objectives**

- Origin, Bloom's Taxonomy of Instructional Objectives (1956) ,
- Classification by NCERT,
- Mc Cormack and Yagar's classification,
- Technology Integrated Taxonomy –Peck & Wilson (1999) ,
- Revised Blooms Taxonomy by Anderson and Krathwohl (2001).

### **Instructional Management: Traditional to Digital.**

- Teacher initiated methods- Lecture method, Lecture cum Demonstration, Biographical
- 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.
- ICT and Multimedia as technology enhanced communication devises in the teaching of life science
- Web 2.0 tools

- Networking- meaning and scope of Net working in science learning.
- M. learning
- Meaning and importance of planning, Types of planning – Year plan, Unit plan, lesson plan and Resource Unit
- lesson plans based on following approaches and Models of teaching- Herbartian Approach, Constructivist Approach, Concept attainment model(CAM), Inquiry Training Model(ITM), 5E Model
- Teaching skills –Definition, Core teaching skills, Components of teaching skills, Teaching skills specially required for Biology/Home Science teacher.
- Curriculum-Meaning-functions and, Principles of curriculum construction,
- Approaches to curriculum organization’
- Critical analysis of the prevailing secondary school biology syllabus.
- Curriculum reforms in India(NCERT) & abroad (BSCS).

#### **Evolving Assessment Practices in Natural Sciences.**

- Reflection and feedback- Assessment of student’s performance.
- Objective based evaluation.
- Assessment &Evaluation tools
- Question Bank with different testitems (HOT, LOT Questions),
- Achievement Test.
- Diagnostic tests &Remedial Teaching.
- Modern Trends in Evaluation.
- Continuous comprehensive evaluation.
- Rubrics for assessing of Assignments, Projects, Debates, Seminars and Discussions.

#### **Reflective Reading and Teacher competencies.**

- Relevance and scope of Reflective reading.
- Teacher competencies for Science learning
- Standards for Teacher Competence in Educational Assessment of Students.

## REFERANCES

- Blooms, B.S. (Ed.), *Taxonomy of Educational Objectives: The Classification of Educational Goals, Handbook I: Cognitive Domain*, McKay, New York, 1956.
- 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., *A Text Book of Teaching Life Science*.
- Krathwohl, D.R., B.S.Bloom, and B.B.Maria, *Taxonomy of Educational Objectives, Hand Luhmann Book II: Affective Domain*, Mckay, New York, 1964.
- 33.NCF-2005, NCERT, New Delhi.
- NCERT, Government of India, *National Curriculum Framework(NCF)*,2000, New Delhi, 2000.
- NCERT, Government of India, *National Curriculum Framework(NCF)*,2005, New Delhi, 2005.
- R.A. Sharma ., (2009). *Information and Communication Technology in Teaching*, Lall Book Depot, Meerat.
- JahithaBegum ,Natesan, G,Sampath, (2011). *ICT in Teaching Learning* ,Balaji offset, Delhi.
- Krishna Sagar,(2005). *ITCs and Teacher Training*, Tarunoffset, Delhi.
- Hussain M. (2012). *E.Learning*, Srikrishna offset Pvt, Delhi
- Anshulkaushik., (2007). *Computer security – insiders view to Network forensics*, Khana book publishing company , Delhi
- Carl simmons, Claire Hawkins (2009). *Teaching ICT-Developing as a Reflective Secondary Teacher* , Sage South Asia education,
- Majibulhussan., (2009). *Educational Evaluation*, A P H Publishing Corporation, New Delhi.
- Sidhu. K.S, (2005). *New Approaches to Measurement and Evaluation*, Sterling Publishing, Delhi.
- Robert M.Thorndike., (2011). *Measurement and Evaluation in Psychology and Education*. Sterling Publishing, Delhi
- Norman herr(2007)*The Sourcebook for Teaching Science – Strategies, Activities, and Instructional Resources*, ISBN 978-07879-72981 [or 07879-72983] San Franciso,CA John Wiley/Jossey- Bass publishers.
- Government of India, *Report of Science Teaching in Secondary Schools, Committee on Plan Projects*, New Delhi, 1964.Hodson, D. and D.J. Reid, *Science for All Motives, Meaning and Implications*, School Science Review, pp. 653-661, 1988.

## INTERNET REFERENCES

- <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.91...>
- [http://en.wikipedia.org/wiki/Technological\\_Pedagogical\\_Conte...](http://en.wikipedia.org/wiki/Technological_Pedagogical_Conte...)
- <http://www.amazon.com/books/dp/0805863567>

- <http://www.csun.edu/science/biology/index.htm>
- [http://archive.org/stream/modernmethodsand029422mbp/modernmethodsand029422mbp\\_djvu.txt](http://archive.org/stream/modernmethodsand029422mbp/modernmethodsand029422mbp_djvu.txt)
- [http://\*\*books\*\*.google.com/\*\*books\*\*/about/Modern\\_\*\*Methods\*\*\\_and\\_Mater...](http://books.google.com/books/about/Modern_Methods_and_Mater...)



## **APPENDIX**

### **CORE PAPERS**

#### **Seminar**

Any presentation by the student teacher in eight to ten minutes based on the theoretical components. The assessment can be on the following criteria.

- ◆ Preparation
- ◆ Content competency
- ◆ Report
- ◆ Presentation
- ◆ Originality

#### **Practical**

The aim is to familiarize the design, administration and scoring of psychological tools/Technological Tools . Any practical experience in the use of tools and techniques should be given. Lab experience is an essential component for all student teachers. At least two practical in each semester should be done and a record must be kept for assessment. The criteria for assessment include:

- ◆ Attendance in the Psychology lab / Technology lab
- ◆ Genuine involvement of the subject
- ◆ Recording
- ◆ Speed and accuracy of the administration of tool
- ◆ Nature of the tool( standardized or not)

#### **Tests**

Periodical tests of short duration can be conducted and the average of test scores can be calculated for internal assessment. The tests should include all types of questions and one or two tests must of MCQs. It is also advised to conduct a college level mid semester examination for 25 marks including all types of questions other than essay question as part of internal assessment.

#### **Capacity building Activities**

The aim of the activity is to equip student teachers to face the challenges of classroom situation in a multicultural society and also uplift the quality of teacher education in par with the global standards. Any activity that can enrich the student teacher by considering the individual potentialities of learners can be undertaken and a report of the activity should be maintained for assessment. The programmes can be planned based on the following themes.

- ◆ Communication skills
- ◆ Decision making
- ◆ Remediation/ Intervention
- ◆ Incorporating creative expressions in teaching
- ◆ Innovations in teaching
- ◆ Problem solving
- ◆ Self awareness and empowerment
- ◆ Extension programmes
- ◆ Exploiting community resources
- ◆ Entrepreneurship

The assessment criteria include:

- ◆ Proficiency in the activity
- ◆ Applicability in profession
- ◆ Recording
- ◆ Individual effort
- ◆ Challenges overcome

### **School based activity**

The aim of the activity is to equip student teachers proficient in initiation, organization and management of student centered programmes considering the demands of the group. Student teachers can conduct any activity/ programme in connection with the theoretical transaction of Educational Psychology in classroom in order to help school students for meaningful learning. The activity must be conducted during the practice teaching period and a brief report of the work with necessary evidences should be submitted for internal assessment.

**N.B. All the reports that come under internal assessment must be clear, short and specific with supporting evidences and not exceeding 10 pages. Hand written documents must be submitted by student teachers.**

## **EDU 401.1 Research Project**

### **A. Tentative Schedule for Minor Project/Action Research/Case Study**

#### ***Phase I of school internship – Semester - III***

- Identification and Selection of the issue/theme
- Searching available information/related studies
- Selection/Adoption/Preparation of tool for data collection/collection of evidences.

#### ***Phase II of school internship – Semester - IV***

- Selection of sample
- Finalization of the tool and data collection
- Analysis of the data and reporting.

### **B. Format of the Report of Minor Project/Case Study/Action Research**

- Introduction
- Significance of the Study, Objectives of the study, Hypotheses , Related Studies
- Method of Study , Sample selection, Tools used in the study, Data collection, Measures adopted for calculation
- Analysis of the data, findings of the study, implications.

### **C. Evaluation of the Report**

- The problem and Title. ( 5 marks)
- Statement of Objectives and Hypotheses/research questions (10 marks)
- Sample and Tools for the study including data collection (10 marks)
- Analysis of data-procedures adopted and clarity (10 marks)
- Findings of the study(5 marks)
- Viva-voce (10 marks)- (external assessment only).

### **D. Viva-voce : 10 marks ( viva – voce criteria )**

- Thoroughness of the study
- Novelty/originality of the study
- Initiative of the researcher
- Presentation of the study
- Capacity to Substantiate / (2 marks each).

### Academic Calendar - Semester – I ( working days-100).

Activities/programmes	June	July	August	September	October	Remarks
Admission						
General Orientation (for details refer curriculum)						
College Union Elections						
Theory & CE (EDU 01-05)						
College Based Practicals: EDU-101.1 Discussion, demonstration & Criticism lessons.						
EDU-101.1 : Micro-teaching ( 2 skills)						
EDU-101.2 :Yoga, Health & Physical Education.						
EDU-101.3 :Art & Aesthetics Education						
Community based practicals - EDU 103.1: Field trip (optional)						
EDU-103.1 : SUPW/ Community Work/vocational edn.						
Mid Semester Examination-internal						
Semester end examination-external						

### Academic Calendar - Semester – II ( working days-100).

Activities/programmes	November	December	January	February	March	Remarks
Theory & CE (EDU 06-10)						
College Based Practicals: EDU-201.1. Discussion, demonstration & Criticism lessons.						
EDU-201.2 :Yoga, Health & Physical Education.						
EDU-201.3 :ArtEducation & Theatre practice.						
School based practical - EDU-202.1 : School Induction programme.						
Community based practicals - EDU 201.1: Field trip/Edn Tour/Community Extension Project(group) (optional)						
Mid Semester Examination-internal						
Semester end examination-external						

### Academic Calendar - Semester – III ( working days-100).

Activities/programmes	June	July	August	September	October	November
Theory & CE (EDU 11-13)						
College Based Practicals: EDU-301.1 : Art and Aesthetics Education						
School based practicals EDU-302.1 : School internship Phase-I						
EDU-301.2 : Health & Physical Education.						
Community based practicals EDU 303.1: Community Living Camp.						
Mid Semester Examination-internal						
Semester end examination-external						

### Academic Calendar - Semester – IV( working days-100).

Activities/programmes	November	December	January	February	March	Results
Theory –EDU-14.& 15						
EDU-401.1 : Minor Project/Action Research/Case Study.						
EDU-401.2 :School Internship Phase-II.						
EDU-401.3 : Achievement Test						
EDU-401.3: Diagnostic Test						
EDU 401.3: Reflective Journal.						
EDU 401.3: Reading & reflecting on the text						
Mid Semester Examination-internal						
Practical Examination-Phase –I.						
Practical Examination-Phase-II.						
Semester end examination-external						
<b>Publication of Result</b>						<b>April</b>

# EVALUATION SHEET

## (Teaching practice)

Name of the student:

Co-operating /practicing school:

Subject:

Standard:

Date:

Criteria	Max. Score	Scores Secured					
		Observation of lessons					Average Score
		1	2	3	4	5	
1. Lesson template	10						
2. Set induction( Introduction of the lesson)	10						
3. Development of the Lesson	10						
4. Learning Experiences (Activities)	10						
5. Learner Involvement	10						
6. Use of Audio-Visual Aids & Technology Integration	10						
7. Mastery of the subject matter	10						
8. Classroom management	10						
9. Closure of the lesson	10						
10. Assessment and evaluation	10						
Total	100						

Overall impression about teaching: Excellent /Very good/Good /Satisfactory/Needs improvement  
 (90% or above) (80-89%) (60-79%) (50-59%) (below 50%)

Place:

Name and Signature of the observer:

Date:

# RATING SCALE

## (Pre-practice Teaching)

Name of the student:

Co-operating /Practicing school:

Subject:

Standard:

Date:

Topic :

Sl. No	Criteria	Excellent (90% and Above)	Very Good (80-89%)	Good (60-79%)	Satisfactory (50-59%)	Needs Improvement (Below 50%)
		A	B	C	D	E
1.	Lesson template					
2.	Set induction ( Introduction ofthe lesson)					
3.	Development of the Lesson					
4.	Learning Experiences (Activities)					
5.	Learner Involvement					
6.	Use of Audio-Visual Aids & Technology Integration					
7.	Mastery of the subject matter					
8.	Classroom management					
9.	Closure of the lesson					
10.	Assessment and evaluation					
	<b>Total</b>					

Place:

Name and Signature of the observer:

Date:

### Teacher Observation Standards Rubric- Assessment Tool

Sl. No	Level/ Criteria	Excellent	Very good	Good	Satisfactory	Needs improvement
1	Lesson Template	All components of lesson plan including targeted learning objectives are clearly defined. Reflects all important concepts. Prerequisites are well accommodated. Interdisciplinary connections Clear and accurate class room interaction procedures. Self explanatory to a great extent	All most all components of lesson plan are clearly defined. Reflects all most all important concepts. Prerequisites are accommodated. Attempted for Interdisciplinary connections Clear Class room interaction procedures . Self explanatory	Some components of lesson plan need improvement. Reflects the essential concepts P prerequisites accommodated.  More class room interaction procedures are given , but not clear self explanatory to a some extent level.	Some components of the lesson plan need improvement. Pre-requisites included are not properly accommodated. The strategies adopted needs improvement Not self explanatory	Teacher makes content errors. Teacher does not consider prerequisite relationships Teacher plans to use inappropriate strategies Most of the components were not properly defined
2	Set Induction (introduction of the lesson)	Sets a conducive environment Intellectual curiosity of the child is very well aroused. Very well refreshes the pre-requisites needed. Very interesting and most relevant introduction	Sets a suitable environment Intellectual curiosity is aroused. Pre-requisites are checked Interesting and relevant introduction	Sets a suitable environment Only a few Pre-requisites refreshed. Interesting Sets a satisfactory environments	Introduction does not suit to the lesson Prerequisites were not appropriate Learning environment needs improvement.	Introduction to the lesson is not at all appropriate Prerequisites not at all considered



3	Development of the Lesson	<p>Sets a conducive environment Intellectual curiosity of the child is very well aroused. Very well refreshes the pre-requisites needed. Very interesting and most relevant introduction Uses very appropriate learning experiences Eliciting student responses to carry/drive the lesson forward Encouraging student enquiry by asking thought provoking open ended questions (brainstorming). Asking multi-level (lower, middle/higher order) questions. Providing scaffolds in constructing knowledge. Providing real world problem based learning environment. Creating situations for the development of values. Focusing on knowledge</p>	<p>Goals were set and defined. Sequenced the content through elaborating student initiated responses. skilled in directing and/supervising learner activities. Creates and sustains interest among students throughout the class. Uses reinforcers (both positive and negative) for recognition and approval. Skilled in identifying learner needs and learning difficulties. Uses appropriate learning experiences Tries to elicit student responses to carry/drive the lesson forward Asking thought provoking open ended questions. Students are encouraged to construct/generate knowledge. Providing life related problems.</p>	<p>Tries to sequence the content through elaborating student initiated responses. Directing and/supervising learner activities. develops interest among students . Uses reinforcers (both positive and negative) for recognition and approval. Identifies learner needs and learning difficulties. Sets a satisfactory environments Learning experience provided needs improvement Teacher tries to elicit knowledge.  Asking different types of question  Chances for construction/generation of knowledge. Offers some accommodation to support different levels of learners.</p>	<p>Student initiated responses for developing the content needs improvement Involvement in learner activities is essential. More reinforcers (both positive and negative)are required for recognition and approval. . Learning environment needs improvement. Learning experience provided not at all appropriate. Teacher domination in learning activities  Questions asked are not serving the purpose  Offers minimum accommodation to support different levels of learners.  .</p>	<p>Students not participated in content development.  No reinforcement(both positive and negative) Teacher does not recognise the role of student in teaching learning process Learning environment developed is not suitable to the lesson Learning experience needs change  No student participation Only a very few questions were asked. Most of the questions asked are leading  . .</p>
---	---------------------------	---	--	---	---	---

		<p>construction/generation</p> <p>Relates present learning with previous and future learning.(opportunity for applying knowledge)</p> <p>Accommodation to support different levels of learners.</p>	<p>Tries to individualise instruction.</p> <p>Accommodation to support different levels of learners.</p>	.		
4	Learning Experiences (Activities)	<p>Life related to the maximum, variety of activities used, interesting</p> <p>Relevant</p> <p>Child friendly</p> <p>Participatory</p> <p>Satisfying all levels of learners</p> <p>Adequate number of activities</p>	<p>Life related</p> <p>Variety of activities were included, interesting</p> <p>Participatory</p> <p>Considered the different levels of learners</p> <p>Adequate number of activities included</p>	<p>Life related</p> <p>Participation of some learners, interesting to some extent</p> <p>Satisfies some learners only</p> <p>Minimum number of activities were included</p>	<p>Not directly related to life</p> <p>Minimum activities used</p> <p>Does not consider the different levels of learners</p>	<p>Not related to life</p> <p>Activities used are not appropriate and child friendly</p>
5	Learner Involvement	<p>Learners are actively constructing relationships and create metaphors.</p> <p>Learners are actively engaged in dialogue both with the teacher and one another.</p> <p>Learner autonomy and initiative is well appreciated.</p>	<p>Learners are constructing relationships and create metaphors.</p> <p>Encourages learners to engage in dialogue both with the teacher and one another.</p> <p>Learner autonomy and initiative are good.</p>	<p>Learners are actively constructing relationships and create metaphors.</p> <p>Learners are engaged in dialogue both with the teacher and one another.</p> <p>Encourage and accept learner autonomy</p>	<p>More Learners involvement in constructing knowledge is expected.</p> <p>Learners are expected to have more dialogue both with the teacher and one another</p>	<p>No learner involvement in knowledge construction.</p> <p>Teacher-learner interaction and learner-learner interaction is very poor</p>

		All learners are participating in the teaching learning process		and initiative.		
6	Use of Audio-Visual Aids & Technology Integration	Proposed technology use is engaging, age appropriate, beneficial to learning and supportive of higher level thinking skills. Writings in the Board – well planned, neat and legible. Technology is integrated to the success of the lesson plan A clear relationship between use of technology and student learning Selects and uses appropriate audio-visual aids.	Proposed technology use is engaging, age appropriate, beneficial to learning and supportive of certain higher level thinking skills.  Writings were planned  Selects and uses appropriate audio-visual aids.	Proposed technology use is engaging and, age appropriate, but not clear how it enhances student learning Selects and uses appropriate audio-visual aids some times. Black board was used to the minimum	Proposed technology use is age appropriate and  Audio visual aids are used to the minimum	Proposed technology use is not engaging, not age appropriate, not beneficial to learning and not at all supportive of certain higher level thinking skills.  No use of Audio visual aids .
7	Mastery of the subject matter	Clear understanding of the objectives and how it to be delivered. Current research and data includes in the lesson. Thorough and deep content knowledge Knowledge of accurate	Clear understanding of the objectives and how it to be delivered Deep content knowledge Necessary content is known to the teacher Content knowledge is accurate	Content knowledge is the minimum Knowledge of supplementary materials to some extent level	More content knowledge is a must Knowledge of supplementary materials to minimum	Teacher is not clear about the objectives and how to deliver it. Poor content knowledge Teacher makes errors in content

		and updated content Vast knowledge of the supplementary materials.	Necessary supplementary materials were clear to the teacher			
8	Class Management	Develops good rapport with learners Names of all learners are known to the teacher Deals with misconduct very effectively Learners are self disciplined. Recognises attending and non attending behaviours Keeps learners in eye span Learners do group works very systematic	Teacher has a command on students Calls pupils/groups by their names Stops misconduct Learners acts according to the direction of teachers. Learners acts according to the direction of the teacher Learner Manages group activities.	Teacher doesn't give much importance to discipline  Learners are restless during group work	Learners are not at all disciplined  Difficult to control in group work	Learners are wandering/playing in the class  Learners are forced to do group work Teacher punishes for their misbehave
9	Closure of the Lesson	Summarised the lesson with respect to each learning point effectively Provides situations for reflective practice after each class. Provides appropriate feedback. Provides remedial measures daily. Provides enrichment activities for reinforcing the constructed knowledge.	Reviews major points in the lesson  Provide reflective practice as a means of evaluation  Provides remedial measures on alternate days	Repeats the main points of the lesson  After each class student is advised to reflect on the class.	Summarises some points of the lesson  Teacher does not insist on reflection	No review of the content is done  Reflection is not a matter of the teacher

10	Assessment and evaluation	<p>Questions for authentic assessment of all targeted objectives are included</p> <p>A clear relationship is evident between learning objectives and assessment of learning.</p> <p>Assessment tools contain topic specific criteria to serve as a helpful scaffold for learners</p> <p>Provision for formative evaluation through out the session</p>	<p>Questions for authentic assessment of all most all targeted objectives are included</p> <p>A clear relationship is evident between learning objectives and assessment of learning.</p> <p>Assessment tools contain majority topic specific criteria to serve as a helpful scaffold for learners</p> <p>Provision for formative evaluation to a greater extent</p>	<p>Questions for authentic assessment of some targeted objectives are included</p> <p>A clear relationship is evident between some learning objectives and assessment of learning.</p> <p>Assessment tools contain some topic specific criteria to serve as a helpful scaffold for learners</p> <p>Provision for formative evaluation to some extent</p>	<p>Questions for authentic assessment of few targeted objectives are included</p> <p>A clear relationship is evident between few learning objectives and assessment of learning.</p> <p>Assessment tools contain few topic specific criteria to serve as a helpful scaffold for learners</p> <p>Minimum provision for formative evaluation</p>	<p>Questions for authentic assessment of all targeted objectives are not included</p> <p>No clear relationship is evident between learning objectives and assessment of learning.</p> <p>Assessment tools do not contain topic specific criteria to serve as a helpful scaffold for learners</p> <p>No provision for formative evaluation .</p>
----	---------------------------	--	--	--	--	---

### CRITERIA FOR AWARDING SCORES IN COMMUNITY LIVING CAMP

Criteria	Very good	Good	Satisfactory	Need improvement
Participation in planning and implementing educational activities during the camp	4	3	2	1
Participation in the creative/ expressive/ demonstrative/ presentation aspects of different sections	4	3	2	1
Leadership quality/ Democratic culture/ Social accommodation & adaptability/ Group working skill	4	3	2	1
Participation in the community related programmes/ activities	4	3	2	1
Comprehensiveness of report (Record)	4	3	2	1

### **Structure of a Report (Record) of Community Living Camp**

- Community Living Camp- Introduction ( need and significance)
- Main theme of the camp during the academic year
- Objectives
- Module
- Session wise details (objective of the session, programme/ activity, consolidation/ outcome with self assessment)
- Conclusion
- Appendix
  - Organising committee
  - List of groups/ members
  - Responsibilities ( group wise)

(Maximum 10 page)