ANNAMALAI UNIVERSITY
DEPARTMENT OF EDUCATION

(For students admitted from the academic year 2019-2020)

REGULATIONS FOR TWO YEAR B.Ed PROGRAMME

1. Duration of the Programme:
   The programme is for a period of 2 years (Non Semester).

2. Medium of Instruction:
   The medium of instruction will be in English. The Tamil medium will be offered only to the graduates who have opted Pedagogy Course-I as Tamil.

3. Eligibility Criteria:

i. The candidates should have undergone 10+2+3 (15) or 11+1+3 (15) pattern of study and passed qualifying examinations conducted by the respective State Board or CBSE or any other recognized Board of Education /Examination and UG Degree Examination of the UGC Recognized Universities in any one of the school subjects offered by the Directorate of School Education at the Secondary/Higher Secondary Educational Level.

ii. Engineering and Technology candidates should have undergone 10+2+4 (16) pattern of study and passed qualifying examinations conducted by the recognised universities.

iii. Candidates who have passed the UG or PG Degree in Open University System without Qualifying in 11 years SSLC examination and 1 year of pre-university course (PUC) examination (or) 10+2 pattern of school Education examination **shall not be considered for admission.**

iv. Candidates who have taken more than one main subject in Part-III/Part-IV under (Double/Triple major system) of the UG degree should have to choose only one of the main subjects and should have applied for that optional only. In such cases, mark obtained by the candidates in two/three major subjects shall be taken into account to arrive percentage of marks as stipulated in item (viii).

v. Candidates who have passed under Additional Degree Programme with less than three years duration are not eligible for admission.

vi. Candidates who have passed under Four year dual Degree Programme with two major subjects under Part-III are not eligible for admission.

vii. Candidates who have qualified in PG Degree (Five year integrated Degree Programmes) under 10+2+5 or 11+1+5 pattern of study shall be considered for admission in such cases, the marks obtained by the candidates in the PG shall be taken into account for admission to the B.Ed Degree Programme.

viii. a. Engineering and Technology candidates can apply for mathematics or   physical science.
   b. Candidates who have done their UG degree in Applied Mathematics can apply for Mathematics.
   c. Candidates who have done their UG degree in Applied Physics, Geophysics, Biophysics and Electronics can apply for Physical Science.
   d. Candidates who have done their UG Degree in Biochemistry and Applied Chemistry can apply for Physical Science.
   e. Candidates who have done their UG Degree in Biotechnology and Plant Biology & Plant Biotechnology can apply for Natural Science.
   f. Candidates who have done their UG Degree in Environmental Science and Microbiology can apply for Natural Science.

g. Post Graduates candidates in Economics and Commerce with 50% (irrespective of their UG marks) of marks in PG degree or inter disciplinary subjects which are being declared equivalent by the respective University can apply.

h. The candidates qualified in PG degree and secured 50% of marks with the same major subjects in UG Degree but not fulfilling the minimum percentage of marks required in UG degree as per community/category-wise will be eligible.

i. Candidates who have done their UG in the school subjects are eligible for admission to B.Ed for others they have to obtain an equivalence certificate for the respective subjects from the concerned Universities to consider their admission to B.Ed. degree programme. The decision of the University shall be final in this regard.

j. Candidates who have done their UG level without language Tamil or other Indian Languages under Part-I and are awarded degree with English and Main subjects concerned need to be considered for admission to B.Ed. subject to the condition that they have to qualify in Tamil Language Test conducted by the TNPSC for the purpose of employment.

ix. Candidates with the following marks in the Bachelor's Degree eligible for admission to the

course other than subjects like Economics and Commerce for which PG qualification is mandatory.

Community/Category	Minimum Marks
OC	50%
BC	45%
MBC/DNC	43%
SC/SCA/ST	40%
Physically and Visually Challenged	40%

Note: Engineering and Technology students, candidates should have specialized in science and mathematics with 55% of marks or other qualification equivalent thereto. The candidates belonging to SC, ST categories candidates should have scored a minimum of 50% marks.

a. Marks obtained by the candidates in UG degree under Part-III/IV Major/Elective/Allied/Extra Disciplinary subjects including practical (other than subjects Economics and Commerce) alone shall be taken into account to arrive at the percentage of marks mentioned above. Marks obtained under Part-V subjects shall not be taken into account to arrive percentage of marks.

b. Marks obtained by the candidates in PG degree (other than Economics, Commerce) shall not be considered for admission.

c. Rounding of marks to the next higher integer shall not be permitted.

d. The candidates who have qualified in Bachelor's Degree under Open University System after passing 10th Std. and +2 examinations shall alone be considered for admission to B.Ed. Degree Course.

e. The Candidates who have qualified in Bachelors degree under Open University System without passing 10th and +2 examination and subsequently passing 10th and +2 examinations are not eligible for admission to B.Ed degree Programme.

f. Candidates who have passed PG degree in Economics and Commerce without undergoing 10+2+3 or 11+1+3 pattern of education shall not be considered for admission.

i. In the case of Differently Abled, Physically and Visually Challenged Candidates, a minimum pass in the degree is enough.

However, the basis of selection shall be in accordance with the regulations of the University/ Government of Tamil Nadu Guidelines for admission to B.Ed. programme in force from time to time.

4. Programme Framework:

YEAR	WORKING DAYS	WORKING HOURS	MARKS		CREDITS		TOTAL	
			THEORY	PRACTICAL	THEORY	PRACTICAL	MARK	CREDITS
FIRST YEAR	200	600	500	500	20	20	1000	40
SECOND YEAR	200	600	400	600	16	24	1000	40

5. Programme Objectives (POS)

- To enable student teacher to understand the terms and concepts in teacher education
- To provide opportunities to student teachers that enable learning experiences to make the subject matter meaningful.
- To make student teachers understand the different approaches to learning and create learning opportunities that benefit diverse learners
- To develop the skills among student teachers to plan learning experiences inside and outside the class room.
- To develop the capacity among student teachers to acquire knowledge of effective verbal, non-verbal and media communication techniques
- To enable the student teachers understand the assessment strategies to ensure all round development of learners
- To provide student teachers self-identity as a 'teacher' through school based learning experiences and reflective practices
- To modify the behaviour, attitude and values of student teachers to shape into responsible and accountable agents of change in the society
- To enable student teachers to use ICT in the Teaching Learning Process
- To provide a rich programme of curricular and extra-curricular activities for student teachers for all round development of their personalities

6. Programme Content:
The course of study, which shall last for two academic year, shall comprise of the following:

STRUCTURE OF CURRICULUM FOR (BOTH YEARS)

SI.No.		COURSES	MARKS	CREDITS
		PART-A: THEORY COMPONENTS		
I	**GROUP–A** Core Courses	BEDC101. Basics of Education	100	4
		BEDC102. Psychology of Learner and Learning	100	4
		BEDC103. Schooling, Socialisation and Identity	100	4
		BEDC201. Curriculum and School	100	4
		BEDC202.Vision of Education in India: Concerns and Issues	100	4
II	**GROUP-B** Pedagogical Courses	Pedagogical Course-I (Part- I)	100	4
		Pedagogical Course-I (Part- II)	100	4
		Pedagogical Course-II (Part- I)	100	4
		Pedagogical Course-II (Part- II)	100	4
		PART-B: PRACTICUM COMPONENTS		
III	**GROUP-C** Developing Teacher Sensibilities	**Teacher Enrichment Activities**		
		BEDP101. Work Education through Community Engagement	50	2
			50	2
		BEDP201. Enriching Learning Through ICT	25	1
		BEDP102. Health and Physical Education (Part-I)	25	1
		BEDP202. Health and Physical Education (Part-II)	25	1
		BEDP103. Arts &Aesthetics(Part-I)	25	1
		BEDP203. Arts &Aesthetics(Part-II)	50	2
		BEDP105.Yoga Education	50	2
		BEDP104. Exploring Learning Resources	50	2
		BEDP204. Community Camp/ Educational Tour	50	2
		BEDP205. Psychological Testing and Case study	50	2
		BEDP106. Enhancing Teaching Skills	50	2
		BEDP206. Preparation of Instructional Software		
		Social and Environmental Sensitivity Activities		
		BEDP111. Assessment for Learning(Part-I)	50	2
		BEDP211. Assessment for Learning (Part-II)	50	2
		BEDP212. Gender Issues in Education	50	2
		BEDP112. Education for Peace	50	2
		BEDP113. Issues of Conservation and Environmental Regeneration	50	2
		BEDP213. Addressing Special Needs in Classroom	50	2
		BEDP121 School Internship	300	12
		TOTAL	**2000**	**80**

DISTRIBUTION OF COURSES FOR THE FIRST YEAR

S.No		COURSES	MARKS	CREDITS
		PART-A: THEORY COMPONENTS		
I	**GROUP – A** Core Courses	BEDC101. Basics of Education	100	4
		BEDC102. Psychology of Learner and Learning	100	4
		BEDC103. Schooling, Socialisation and Identity	100	4
II	**GROUP -B** Pedagogical Courses	**PC- I: Pedagogical Course-I** **Subject for Graduates:** BEDO111. Pedagogy of Tamil (Part-I) BEDO112. Pedagogy of English (Part-I) **Subjects for Post Graduates:** BEDO113. Pedagogy of Mathematics (Part-I) BEDO114. Pedagogy of Physics (Part-I) BEDO115. Pedagogy of Chemistry (Part-I) BEDO116. Pedagogy of Zoology (Part-I) BEDO117. Pedagogy of Botany (Part-I) BEDO118. Pedagogy of Computer Science (Part-I) BEDO119. Pedagogy of History (Part-I) BEDO120. Pedagogy of Economics (Part-I) BEDO121 .Pedagogy of Commerce (Part-I)	100	4
		PC- II: Pedagogical Course-II (Part- I) Subjects for Graduates and Post Graduates: BEDO131. Pedagogy of Tamil (Part-I) BEDO132. Pedagogy of English (Part-I) BEDO133. Pedagogy of Mathematics (Part-I) BEDO134. Pedagogy of Physical Science (Part-I) BEDO135. Pedagogy of Biological Science (Part-I) BEDO136. Pedagogy of Social Science (Part-I) BEDO137. Pedagogy of Computer Science (Part-I) BEDO138. Pedagogy of Economics (Part-I) BEDO139. Pedagogy of Commerce (Part-I)	100	4
		PART-B: PRACTICUM COMPONENTS		
III	**GROUP-C** Developing Teacher Sensibilities	**Teacher Enrichment Activities** BEDP101. Work Education through Community Engagement BEDP102. Health and Physical Education (Part-I) BEDP103. Arts &Aesthetics(Part-I) BEDP104. Exploring Library and other Learning Resources BEDP105. Yoga Education BEDP106. Enhancing Teaching Skills	50 25 25 50 50 50	2 1 1 2 2 2
		Social and Environmental Sensitivity Activities BEDP111. Assessment for Learning(Part-I) BEDP112. Education for Peace BEDP113. Issues of Conservation and Environmental Regeneration	50 50 50	2 2 2
		BEDP221 School Internship	100	4
		TOTAL	**1000**	**40**

Note: Each students would be offered two pedagogical course one from in pedagogical course-I and one from in pedagogical course-II in accordance with the major subject at graduate/post graduate level subject.

DISTRIBUTION OF COURSES FOR THE SECOND YEAR

SI.No.		COURSES	MARKS	CREDITS
		THEORY COMPONENTS		
I	**GROUP – A** Core Courses	**BEDC201. Curriculum and School**	100	4
		BEDC202.Vision of Education in India: Concerns and Issues	100	4
II	**GROUP-B** Pedagogical Courses	**PC- I: Pedagogical Course-I** **Subject for Graduates:** BEDO211. Pedagogy of Tamil (Part-II) BEDO212. Pedagogy of English (Part-II) **Subjects for Post Graduates:** BEDO213. Pedagogy of Mathematics (Part-II) BEDO214. Pedagogy of Physics (Part-II) BEDO215. Pedagogy of Chemistry (Part-II) BEDO216. Pedagogy of Zoology (Part-II) BEDO217. Pedagogy of Botany (Part-II) BEDO218. Pedagogy of Computer Science (Part-II) BEDO219. Pedagogy of History (Part-II) BEDO220. Pedagogy of Economics (Part-II) BEDO221. Pedagogy of Commerce (Part-II)	100	4
		PC- II: Pedagogical Course-II (Part- I) Subjects for Graduates and Post Graduates: BEDO231. Pedagogy of Tamil (Part-II) BEDO232. Pedagogy of English (Part-II) BEDO233. Pedagogy of Mathematics (Part-II) BEDO234. Pedagogy of Physical Science (Part-II) BEDO235. Pedagogy of Biological Science (Part-II) BEDO236. Pedagogy of Social Science (Part-II) BEDO237. Pedagogy of Computer Science (Part-II) BEDO238. Pedagogy of Economics (Part-II) BEDO239. Pedagogy of Commerce (Part-II)	100	4
		PRACTICUM COMPONENTS		
III	**GROUP-C** Developing Teacher Sensibilities	**Teacher Enrichment Activities** BEDP201. Enriching Learning Through ICT	50	2
		BEDP202. Health and Physical Education (Part-II)	25	1
		BEDP203. Arts &Aesthetics(Part-II)	25	1
		BEDP204. Community Camp/Educational Tour	50	2
		BEDP205. Psychological Testing and Case study	50	2
		BEDP206. Preparation of Instructional Software	50	2
		Social and Environmental Sensitivity Activities BEDP211. Assessment for Learning (Part-II)	50	2
		BEDP212. Gender Issues in Education	50	2
		BEDP213. Addressing Special Needs in Classroom	50	2
		School Internship	200	8
		TOTAL	**1000**	**40**

Note: Each student would be offered two pedagogical course one from in pedagogical course-I and one from in pedagogical course-II in accordance with the major subject at graduate/post graduate level subject.

7. Scheme of Examination:

PART-A: WRITTEN EXAMINATION

The marks to be obtained by the candidates in the University Examination in respective Courses for first year and second year are as follows:

FIRST YEAR

COURSES	Duration Hours	Internal marks (Formative)	External marks (Summative)	Minimum Marks for a pass in External (45% out of 75)	Total marks	Credits
I. Basics of Education	3	25	75	34	100	4
II. Learner and Learning	3	25	75	34	100	4
III. Schooling, Socialisation and Identity	3	25	75	34	100	4
IV. Pedagogical Course-I (Part-1)	3	25	75	34	100	4
V. Pedagogical Course-II (Part-1))	3	25	75	34	100	4
Total		**125**	**375**	**---**	**500**	**20**

SECOND YEAR

COURSES	Duration Hours	Internal marks (Formative)	External marks (Summative)	Minimum Marks for a pass in External (45% out of 75)	Total marks	Credits
VI. Curriculum and School	3	25	75	34	100	4
VII. Vision of Education in India: Concerns and Issues	3	25	75	34	100	4
VIII Pedagogical Course-I (Part-2)	3	25	75	34	100	4
IX Pedagogical Course-II (Part-2))	3	25	75	34	100	4
Total		**100**	**300**	**---**	**400**	**16**

Every candidate should appear for all the Courses together in the written examination at the first time. A candidate shall be declared to have passed the examination if he/she obtains not less than 50% marks in each Course (continuous internal assessment and external examinations marks put together) with a minimum of 45% marks in each Course of the external examinations. A candidate who fails to secure the passing minimum in any course/courses and he/she can appear for the failed course/courses alone.   Candidates who have succeeded in the first attempt and obtained not less than 60% of the total marks shall be placed in the first class.

PART-B: PRACTICAL EXAMINATION

Marks for various courses of practical training shall be awarded as follows:

FIRST YEAR

S.No.	Items	Max. Marks	Min. Marks
Unit-I	**School Internship**	**100**	**50**
1	Assessment of Teaching Skills-Optional-I	25	
2	Assessment of Teaching Skill- Optional-II	25	
3	Observation of Teaching and Learning	10	
4	Observation of Innovative Centres of Pedagogy and	10	
5	Learning	10	
6	Observation of Educational Resource Centres	10	
7	Observation of Community Resources	10	
	Viva Voce		
Unit-II	**Teacher Enrichment Activities**	**250**	**125**
3	Work Education through Community Engagement	50	
4	Health and Physical Education (Part-I)	25	
5	Arts &Aesthetics(Part-I)	25	
6	Exploring Learning Resources	50	
7	Yoga Education	50	
8	Enhancing Teaching Skills	50	
Unit-III	**Social and Environmental Sensitivity Activities**	**150**	**75**
9	Assessment for Learning(Part-I)	50	
10	Education for Peace	50	
11	Issues of Conservation and Environmental Regeneration	50	
	Total	**500**	**250**

SECOND YEAR

S.No.	Items	Max. Marks	Min. Marks
Unit-I	**School Internship**	**200**	**100**
1	Teaching Competency for Pedagogical Course-I	75	
2	Teaching Competency for Pedagogical Course-II	75	
3	Lesson Plan	10	
4	Experiences with the Child	10	
5	Experiences with the Community	10	
6	Experiences with the School	10	
7	Viva-Voce	10	

Unit-II	Teacher Enrichment Activities	250	125
3	Enriching Learning Through ICT	50	
4	Health and Physical Education (Part-II)	25	
5	Arts &Aesthetics(Part-II)	25	
6	Community Camp/ Educational Tour	50	
7	Psychological Testing and Case study	50	
8	Preparation of Instructional Software	50	
Unit-III	Social and Environmental Sensitivity Activities	150	75
9	Assessment for Learning (Part-II)	50	
10	Gender Issues in Education	50	
11	Addressing Special Needs in Classroom	50	
	Total	600	300

Assessment regarding PART–B (practicum) shall be done by the staff concerned of the Department of Education. In order to standardize the assessment done by the Department in PART–B, the University shall appoint a Board of supervising Examiners. It shall be the duty of the Board (a) to observe and evaluate the lessons (b) to examine the candidates recommended by the staff concerned and (c) to conduct viva-voce for all the candidates.

The marks for Unit–I shall be given by the teacher concerned on the basis of their own assessment and on that made by the selected teachers in approved participating school in the teaching practice programme. The trainees are required to maintain records of the practical work done by them.

For the other aspect of the practical work coming under Unit–II and Unit-III, each student shall work under the staff concerned and shall maintain a workbook under his/her supervision. Directions regarding the preparation of the workbook in each of the practicum components shall be given by the staff concerned. All records as well as teaching aids prepared by the candidate shall be scrutinized by the Board of Examiners. If necessary, the Board of Examiners shall report to the university, the marks awarded to each student, in the three units of practical Examination separately and the class awarded to each student in the whole examination.

"Submission of all the prescribed records related to both Theory and Practicum. (Continuous internal assessment Unit–I Unit-II and Unit–III) is a pre-requisite to appear for the practical and theory examinations conducted by the university".

A candidate shall be declared to have passed the PART–B (Practical) examination, if he/she obtain not less than 50% in each item in units I ,II, and III.

In the practical examination, those who have succeeded in the first attempt and obtained not less than 60% in respect of each of the units shall be placed in the first class.

Candidate shall be declared to have passed the practical examination if she/he obtains not less than 50% in respect of each item. All other candidates shall be deemed to have failed in the practical examinations.

A candidate who fails only in Unit–I of the practical examination may present himself or herself for this unit alone at a subsequent practical examination at which the Board of Examiners shall examine him or her in that unit alone for declaration of results. A candidate who fails only in Unit–II and Unit-III shall revise the concerned records alone and submit them to the Board of Examiners at the subsequent practical examination for evaluation. A candidate

shall not be permitted to appear for the practical examination on more than two occasions, though the syndicate may in special cases permit candidate to appear on third occasion.

Successful candidates shall be classified separately for (a) written examination and (b) the practical examination. In the case of (a) written examination, candidates who have succeeded in the first attempt and obtained not less than 60% of the total marks shall be placed in First class. In the case of (b) practical examination candidates who have succeeded in the first attempt and obtained not less than 60% of the total marks in each of Unit–I, Unit–II and Unit-III shall placed in the First class. All other Successful candidates shall be placed in the second Class.

8. Question Paper Pattern:

The Syllabus for each course is divided into ten units, and at least one question shall be set in each unit and the question paper should cover the entire syllabus.

Further, the questions set on the content in the case of pedagogical courses should have a bearing on its teaching aspect.

The question paper, in each paper should have three sections Section–A, Section–B and Section–C.

Section–A shall contain very short answer type questions. Without choice.

Section–B shall contain short answer type question. With internal choice.

Section–C shall contain Essay type question. With internal choice (Either or Type). The format is given below:

FORMAT OF QUESTION PAPER

Sl. No.	Type	Length of Answer	No. of Question to be Attempted	Type of Choice	Marks per Question	Total
A	Very Short Answer	Each in about 70 Words	10	No Choice	02	20
B	Short Answer	Each in about 250 Words	5	Out of 7	05	25
C	Essay Type	Each in about 750 Words	2	Internal Choice 2	15	30
	–	–	17	Grand Total	–	75

The questions to each paper in general shall cover all the units in the syllabus.

Questions testing knowledge, understanding and application shall be given due weightage.

9. Classification of Grade and percentage of Marks:

The performance of students in each course is evaluated in terms Grade Point (GP).

The sum total performance in each semester is rated by Grade Point Average (GPA) while Cumulative Grade Point Average (CGPA) indicates the Average Grade Point obtained for all the courses completed from the first semester to the current semester.

The GPA is calculated by the formula

$$GGG = \frac{\underset{GG}{G} G_G G_G}{\underset{\cancel{GG}\ G}{\Sigma G}\ G_G}$$

where, G_G is the Credit earned for the Course Gin any semester; G_G is the Grade Point obtained by the student for the Course Gand G is the number of Courses passed in that semester.

CGPA is the Weighted Average Grade Point of all the Courses passed starting from the first semester to the current semester.

$$GGGG = \frac{\underset{\underset{\underset{G\cancel{G}G\ \cancel{G}GG\ G}{\Sigma G}\ \underset{}{\Sigma G}}{G}}{G}\ \underset{G}{\underset{G}{\underset{G}{G}}}\ \underset{GG}{\underset{G}{\underset{GGG}{GGG}}}}{}$$

where, G_G is the Credit earned for the Course Gin any semester;
G_G is the Grade Point obtained by the student for the Course
Gand G is the number of Courses passed in that semester.
G is the number of semesters

Evaluation of the performance of the student will be rated as shown in the Table.

Letter Grade	Grade Points	Marks %
S	10	90 and above
A	9	80-89
B	8	70-79
C	7	60-69
D	6	55-59
E	5	50-54
RA	0	Less than 50
W	0	Withdrawn from the examination

Classification of Results. The successful candidates are classified as follows:

For **First Class with Distinction:** Candidates who have passed all the courses prescribed in the Programme *in the first attempt* with a CGPA of 8.25 or above within the programme duration. Candidates who have withdrawn from the End Semester Examinations are still eligible for First Class with Distinction (*See Section 12 for details*).

For **First Class:** Candidates who have passed all the courses with a CGPA of 6.5 or above.

For **Second Class:** Candidates who have passed all the courses with a CGPA between 5.0 and less than6.5.

10. Internal Assessment:

The marks obtained by candidate in the internal and external valuations shall be shown separately in the mark list.

There will be no supplementary test for internal Assessment.

Internal assessment marks shall be divided as follows.

Sl. No.	Criteria for Internal Assessment	Duration	No. of Tests/ Task/ Assignment	Distribution of Marks per Paper
I	Test	60 minutes	2	10
II	Practicum work (Task and Assignments) Listed Under Course Outline	Two weeks	4	10
III	Marks for Attendance percentage. (Attendance from the date of commencement of class is compulsory)	60 – 69 (2) marks 70 – 79 (3) marks 80 – 89 (4) marks 90 and above (5) marks		5
	Total		–	25

The internal marks should be sent to the university before the written examination.

The valued answer papers shall be returned to the students for perusal and then collected back from them, after perusal in the classroom itself. The marks shall be displayed in the department Notice Board. The teachers shall also discuss the answer to question in the class and supply the correct answers. The papers shall be available for review by the University, if necessary.

If a student is not satisfied with the valuation of the paper, he/she may appeal to the Head of the Department within 3 days of the announcement of the marks for consideration such appeals shall be referred to the review cell consisting of the Dean of Faculty, the Head of the Department (Nominated by the Head of the Department other than the teachers involved). If the Head of the Department himself/herself is the course teacher, another senior member of the Department in lieu of the Head of the Department will be nominated to be member of review cell. The marks awarded by the cell will be the final marks.

The candidates desirous of improving the internal assessment marks should undergo the course of study once again after obtaining the prior permission of the university, also at the end of the year, after cancelling the pervious appearance of Paper/Papers in the University Examination.

11. School Internship:

During the first year, student teacher shall spend 4 weeks of internship programme in schools. This will include one week of school engagement by the student teacher making observation in the school and 3 weeks for visit to innovative centers of pedagogy and learning, educational resource centers and community resources. Within the institution the observation will focus on understanding the institution in totality, with reference to features such as its philosophy and aims, organization, teachers' role, student needs with respect to their development, curriculum, its transaction and assessment. This period can also be spent for working on projects and tasks based on the course papers in school or out of the school.

During the second year, student teacher shall spend 16 weeks of internship programme in schools, out of 16 weeks one week for observation of regular classes by regular teachers and peer student teachers (at least 5 lesson in each pedagogical subject) and 15 weeks of classroom teaching may be in two spells. The internship for graduates must be both at upper primary (classes VI- VIII) and secondary (classes IX and X) and for post

graduates should be at secondary (classes IX and X) and higher secondary (XI and XII). These two spells of training in the level one and level two may be in one school or in two schools.

   i. All the working days are compulsory during the teaching practice period for the students of B.Ed., Relaxation of attendance in the teaching practice period, not exceeding 10 percent is applicable to only exceptional cases and not a general rule with prior permission from Head of the Department.

  ii. The teaching practice shall be preceded by demonstration classes. All Demonstration and all criticism classes are compulsory for the students to attend the internship programme.

 iii. For the purpose of teaching practice, each student teacher shall work as an apprentice under a selected teacher of an approved school and under the general supervision of the staff of the Department of Education. He/she shall also maintain the prescribed workbook for internship in each pedagogical course. The total 60 lessons of classroom teaching in 15 weeks may be divided as 30 at level one (15 lessons for Pedagogical Course I and 15 lessons for Pedagogical Course II) and 30 at level two (15 lessons for Pedagogical Subject I and 15 lessons for Pedagogical Course II).

  iv. During this period, (i) classroom teaching (ii) evaluation at the end of 15 lessons and (iii) diagnosis based feedback to the students should be completed by every student teacher.

   v. The internship should be in government recognized schools under Government or private managements, situated within the radius of 50 km of the University campus.

12. Programme Outcomes (POS)

After completion of the B.Ed programme the student teachers will

- Acquire knowledge in the concerned content and pedagogy.
- develop an understanding of the contemporary Indian Society with education.
- be able to use learner centered teaching methods as such and with application in future.
- develop an understanding of paradigm shift in conceptualizingdisciplinary knowledge in schoolcurriculum
- create sensitivity about lang√uage diversity in classroom and its role in teaching-learningprocess
- develop the capacity among student teachers to use knowledge of effective verbal, non-verbal and media communication techniques to foster active enquiry, collaboration and supportive interaction in the classroom.
- identify the challenging and overcoming gender inequalities in school, classroom, curricula, textbook and social institutions
- enable student-teachers to acquire necessary competencies for organizinglearning experiences
- enable student-teachers to integrate ICT in facilitating teaching-learning process and in schoolmanagement
- strengthen the professional competenciesof student teachers
- provide first-hand experience of all the schoolactivities
- develop competencies among student-teachers in evaluation strategies

Mapping POs with PO										
Pos	POS1	POS2	POS3	POS4	POS5	POS6	POS7	POS8	POS9	POS10
Po1		**2**								
Po2			**2**							
Po3			**2**							
Po4							**3**			
Po5					**3**					
Po6					**3**					
Po7								**2**		
Po8				**2**						
Po9									**2**	
Po10							**2**			
Po11							**2**			
Po12						**3**				

Programme Specific Outcomes

At the end of the programme, the student will be able to

PSO1:	understand the basic concepts and ideas of educational theory
PSO2:	develop understanding and perspective on the nature of the learner ,diversity and learning
PSO3:	comprehend the role of the systems of governance and structural functional provisions that support school education
PSO4:	develop understanding about teaching pedagogy , school management and community involvement
PSO5:	Develop skills and abilities of communication, reflection, art , aesthetics , self expression and ICT

Course Code	Course Title	Hours/ Week			Marks		
		L	P	C	CIA	ESE	Total
Year-I							
19BEDC101	Core 1: Basics of Education	4		4	25	75	100
19BEDC102	Core 2: Psychology of Learner and Learning	4		4	25	75	100
19BEDC103	Core 3: Schooling, Socialisation and Identity	4		4	25	75	100
	Pedagogical Course-I (PC-I) For Graduates:						
19BEDO111	Pedagogy of Tamil (Part-I)	4		4	25	75	100
19BEDO112	Pedagogy of English (Part-I)	4		**4**	25	75	100
	For Post Graduates:						
19BEDO113	Pedagogy of Mathematics (Part-I)	4		4	25	75	100
19BEDO114	Pedagogy of Physics (Part-I)	4		**4**	25	75	100
19BEDO115	Pedagogy of Chemistry (Part-I)	4		4	25	75	100
19 BEDO116	Pedagogy of Zoology (Part-I)	4		**4**	25	75	100
19 BEDO117	Pedagogy of Botany (Part-I)	4		4	25	75	100
19 BEDO118	Pedagogy of Computer Science (Part-I)	4		**4**	25	75	100
19BEDO119	Pedagogy of History (Part-I)	4		4	25	75	100
19 BEDO120	Pedagogy of Economics (Part-I)	4		**4**	25	75	100
19 BEDO121	Pedagogy of Commerce (Part-I)	4		4	25	75	100
	PEDAGOGICAL COURSE-II (PC-II) For Graduates and Post Graduates						
19BEDO131	Pedagogy of Tamil (Part-I)	4		4	25	75	100
19BEDO132	Pedagogy of English (Part-I)	4		**4**	25	75	100
19BEDO133	Pedagogy of Mathematics (Part-I)	4		4	25	75	100
19BEDO134	Pedagogy of Physical Science (Part-I)	4		**4**	25	75	100
19BEDO135	Pedagogy of Biological Science (Part-I)	4		4	25	75	100
19BEDO136	Pedagogy of Social Science (Part-I)	4		**4**	25	75	100
19BEDO137	Pedagogy of Computer Science (Part-I)	4		4	25	75	100
19BEDO138	Pedagogy of Economics (Part-I)	4		**4**	25	75	100
19BEDO139	Pedagogy of Commerce (Part-I)	4		4	25	75	100
	Teacher Enrichment Activities(TEA)						
19BEDP101	Work Education through Community Engagement		2	2		50	50
19BEDP102	Health and Physical Education (Part-I)		1	1		25	25
19BEDP103	Arts &Aesthetics(Part-I)		1	1		25	25
19BEDP104	Exploring Library and other Learning Resources		2	2		50	50
19BEDP105	Yoga Education		2	2		50	50
19BEDP106	Enhancing Teaching Skills		2	2		50	50
	Social and Environmental Sensitivity Activities(SESA)						
19BEDP111	Assessment for Learning(Part-I)		2	2		50	50
19BEDP112	Education for Peace		2	2		50	50
19BEDP113	Issues of Conservation and Environmental Regeneration		2	2		50	50

Second Year							
19BEDC201	Core 1: Curriculum and School	4		4	25	75	100
19 BEDC202	Core 2: Vision of Education in India: Concerns and Issues	4		4	25	75	100
	Pedagogical Course-I (PC-I) **For Graduates:**						
19 BEDO211	Pedagogy of Tamil (Part-II)	4		4	25	75	100
19 BEDO212	Pedagogy of English (Part-II)	4		4	25	75	100
19 BEDO213	Pedagogy of Mathematics (Part-II)	4		4	25	75	100
19 BEDO214	Pedagogy of Physics (Part-II)	4		4	25	75	100
19 BEDO215	Pedagogy of Chemistry (Part-II)	4		4	25	75	100
19 BEDO216	Pedagogy of Zoology (Part-II)	4		4	25	75	100
19 BEDO217	Pedagogy of Botany (Part-II)	4		4	25	75	100
19 BEDO218	Pedagogy of Computer Science (Part-II)	4		4	25	75	100
19 BEDO219	Pedagogy of History (Part-II)	4		4	25	75	100
19 BEDO220	Pedagogy of Economics (Part-II)	4		4	25	75	100
19 BEDO221	Pedagogy of Commerce (Part-II)	4		4	25	75	100
	Pedagogical Course-II (PC-II) **For Graduates and Post Graduates**						
19 BEDO231	Pedagogy of Tamil (Part-II)	4		4	25	75	100
19 BEDO232	Pedagogy of English (Part-II)	4		4	25	75	100
19 BEDO233	Pedagogy of Mathematics (Part-II)	4		4	25	75	100
19 BEDO234	Pedagogy of Physical Science (Part-II)	4		4	25	75	100
19 BEDO235	Pedagogy of Biological Science (Part-II)	4		4	25	75	100
19 BEDO236	Pedagogy of Social Science (Part-II)	4		4	25	75	100
19 BEDO237	Pedagogy of Computer Science (Part-II)	4		4	25	75	100
19 BEDO238	Pedagogy of Economics (Part-II)	4		4	25	75	100
19 BEDO239	Pedagogy of Commerce (Part-II)	4		4	25	75	100
	Teacher Enrichment Activities(TEA)						
19 BEDP201	Enriching Learning Through ICT	-	2	2	-	50	50
19 BEDP202	Health and Physical Education (Part-II)	-	1	1	-	25	25
19 BEDP203	Arts &Aesthetics(Part-II)	-	1	1	-	25	25
19 BEDP204	Community Camp/Educational Tour	-	2	2	-	50	50
19 BEDP205	Psychological Testing and Case study	-	2	2	-	50	50
19 BEDP206	Preparation of Instructional Software	-	2	2	-	50	50
	Social and Environmental Sensitivity Activities(SESA)						
19BEDP211	Assessment for Learning (Part-II)	-	2	2	-	50	50
19BEDP212	Gender Issues in Education	-	2	2	-	50	50
19BEDP213	Addressing Special Needs in Classroom	-	2	2	-	50	50

*L- Lecture *P- Practical *C-Credit *CIA- Continuous Internal Assessment

*ESE- External Summative Evaluation

Learning Objectives (LO): The student teachers
- acquire knowledge of the educational concepts, their premises and contexts that are unique to education.
- understand the nature of education and their practical ramifications in the school context.
- acquire knowledge of the aims of education and their classification.
- understand the meaning, types and classification of values.
- comprehend the Educational provisions in the Indian constitution.
- acquire knowledge of the meaning, characteristics of culture, cultural lag and relationship with education.

Unit - 1: Meaning, Nature and scope of Education

Meaning of Education - Derivation of the term education - Indian concept of Education - Western concept of Education - Significance of Education-Nature of Education - Scope of Education - Functions of Education - Process of Education.

Unit - 2: Aims of Education - Need and classification

Significance of Aims of Education - Factors affecting aims of Education -General aims of Education - Individual and Social aims of Education -Character development aims and vocational aims of Education - Immediate and ultimate aims of Education.Increasing productivity - Achieving Social and National Integration -Accelerating the process of Modernization-Cultivating Social, Moral and Spiritual values.

Unit - 3: Philosophy and Education

Meaning and definition of philosophy -Relationship between philosophy of life and education- Contribution of philosophy to education-Indian and western philosophies of education- Indian schools- Vedanta Bhagavad Gita ,Jainism and Buddhism.

Unit - 4: Western Schools of Philosophy

Idealism, Naturalism Pragmatism Realism Humanism and Existentialism

Unit - 5: Educational thoughts of Great philosophers

Gandhji, Vivekananda, Tagore, Sri Aurobindo, Rousseau, Froebel, Montessori and Dewey

Unit - 6: Forms of knowledge in School Education

Basis to categorise Knowledge; Forms of knowledge included in school education; Basis of selection of knowledge categories; organization of knowledge in schools; knowledge in the form of curriculum, syllabus and textbooks.

Unit - 7: Autonomy of Teacher and Learner

Meaning of autonomy - Autonomy and freedom. Teacher's autonomy and enriching learning situations; Autonomy and accountability; Factors affecting teacher's autonomy.

Autonomy of Learner - Meaning; Restraints on learners in schools; Learner and freedom; Individual autonomy and collective responsibility for teacher and learner.

Unit - 8 : Formal, Non-formal and Informal types of Education

Meaning, definition and need for different types of agencies of Education; comparison between formal, Non-formal and Informal types. Home, community and mass media as agencies of Education; continuing education and concept of Open University system.

Unit - 9 : Education for changing Indian Society

Concept of Culture - Nature of Culture - Types of Culture -Characteristics of Culture - Salient features of Indian culture - Transmission and Transformation of culture - Cultural lag.

Unit - 10: Modernization

Role of Education in the process of modernization - Explosion of knowledge - rapid social change - Need for rapid advance. Modernization and Educational Progress; Modernization of Indian Society, its significance for education - Instrumental factors like universalization and democratization of education.

For Fast Track Learners

Analysing Satiability of online Education–Analysis of causes of unemployment and underemployment- Value gaps in educational system – suggestion to improve .

Practical Work
- Prepare a report on the organization of knowledge in text books at school level.
- How does teacher autonomy help in enriching learning situations.
- How will you inculcate social, moral and spiritual values.
- Bring out the special provisions in the constitutions relating to Education.
- How worthwhile is education.

Text Books

1. Bhatia.K.K., Philosophical and Sociological bases of Education, Tandon Publications, Ludhiana, 1991.
2. Mohanty.J, Indian . Education in the emerging society, Sterling Publishers, New Delhi, 1994.
3. Swaroop Saxena, Principles of Education R.Lall Book Depot, Meerut, 2002.

Supplementary Reading

1. Ayodhya.P., Dash.B.N. Foundations of Education, Neelkamal Publications Pvt. Ltd., Hyderabad, 2009.
2. Chauba.S.P. Philosophical and Sociological foundations of Education, Agra.
3. Dash.B.N. Trends and Issues in Indian Education, Delhi, Dominant publishers, 2004.
4. Seetharamu.A.S, Philosophies of Education: New Delhi, Ashish publishers, 1998.

Course Outcomes

The student teacher should be able to

CO1: explain the Indian and western concept of Education
CO2: classify the individual and social aims of education
CO3: apply the principles of Philosophy in education
CO4: differentiate among formal, non formal and informal types of education
CO5: explain the role of education in the process of modernization

Outcome Mapping

CO/ PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PS O1	PS O2	PS O3	PS O4	PS O5
CO1	2	2									1				
CO2				2								1			
CO3							1								
CO4									2						
CO5								2							

Learning Objectives (LO): The student teacher

- acquires the knowledge of the basic concepts of educational psychology and individual development.
- acquires the knowledge of different aspects of human behavior.
- understands the innate, environmental cognitive and affective processes influencing the development of the learner.
- understands the theoretical and social constructivist perspectives on learning in different learning situations.
- develops an understanding of processes in human cognition for designing learning environments and experiences at school.
- applies the knowledge and principles of psychology to teaching learning situation.
- develops skill in performing experiments and collection of data.

Unit-1: Educational Psychology and Methods

Psychology - Educational psychology – Definitions - Meaning – Nature and Scope – Relevance of educational psychology to the learner and teacher – Methods of educational Psychology – Introspection – Observation - Case study – Cumulative and Anecdotal.

Unit-2: Learner as a Developing Individual

HeredityandEenvironment- Laws of heredity – Educational implications of heredity and environment – Growth and maturation - Sensation – Perception – Attention – Memory – Thinking and Problem solving

Unit –3: Growth andDevelopmental Stages:

Growth and development –Meaning, characteristics and principles of development – Stagesof development – Infancy – Childhood – Later childhood – Adolescence - Characteristics of each stage and educational implications.

Needs and problems of adolescence - Educational planning for adolescence - Developmental tasks at various stages – Significance about the knowledge of the growth and development process to the teacher.

Unit –4: Human Development and Learning

Relationship between development and learning – Dimensions of individual development – physical, cognitive, language, emotional, social and moral development – Interrelationships and educational implications – Cognition meaning - Role in learning – Intellectual development by Jean Piaget.

Unit –5: Theoretical perspectives on learning

Learning – Meaning and definitions– Characteristics – Behaviourist theories-Thorndike, Pavlov, Skinner. Cognitive theories - Insightful learning –Kohler, Information processing theories -Gagne's hierarchy of learning – Role of learner and teacher in various learning situations

Unit –6: Learning in Constructivist perspective

Distinctions between learning as construction of knowledge and transmission and reception of knowledge - Constructivist theories of Piaget – Vygotsky's theory of social constructivism - Bruner's theory of cognitive learning – Ausubel's theory of learning - Metacognition.

Unit –7: Motivation and Learning

Motivation –meaning– Motivation in learning – Intrinsic and extrinsic – Achievement motivation and learning - Techniques of enhancing motivation - Characteristics of motivated learner – Maslow's views on motivation - Emotions – Educating positive emotions .

Unit –8: Individual Differences among Learners

Differences among individuals- Cognitive abilities – Interest - aptitude Creativity – Values. Intelligence – meaning – Theories – Spearman's two factor theory – Multifactor theory – Group factor theory – Guilford's structure of intellect – Gardner's multiple intelligence – Emotional intelligence. Measurement of intelligence – Uses of intelligence tests.

Unit –9: Psychological Attribute – Personality

Personality – Meaning and definition – classification – Theories of personality – Freud's psycho-analytical theory – Jung's analytical theory – G.W.Allport's classification – Carl Roger's self-theory - Assessment of personality – subjective and objective methods – projective techniques.

Unit-10: Learning Difficulties and Guidance and Counselling

Learning difficulties –Slow learners– Intellectual deficiency – Intellectual giftedness - Implications for catering to individual variation - Delinquency – Characteristics – causes and preventive measures- Role of Guidance and Counselling for different types of children.

For Fast Track Learners

Conduct of action research applying suitable Educational psychology- finding remedies for day today psychological problems of students- Identification and executing of innovative activities of increasing mental health of adolescent.

Practical Work

To be conducted to children / adolescents
- Span of Attention
- Concept Formation
- Memory for meaningful and Meaningless stimulation
- Transfer of Learning
- Attitude (any one scale)
- Personality test (any one)
- Interest Inventory
- Motivation
- Aptitude tests
- Intelligence Tests.

Text Books

1. Chauhan.S.S, A text of programmed Instruction, Sterling publishers Ltd., New Delhi, 1982.
2. Crow.L.D and Crow.A, Educational Psychology, Eurasia Pub. House, New Delhi, 1973.
3. Eillis, Educational Psychology, Affiliated East, West Press, New Delhi, 1965.
4. Guilford.J.P, Personality, McGraw Hill, New York, 1978.
5. Hilgard.F.R. Theory of Learning, Appleton Century, New York, 1958.
6. Hurlock.E. Development Psychology, Tata McGraw Hill, New Delhi, 1974.
7. Skinner.C.F. Educational Psychology, Prentice Hall of India, New Delhi, 1958.
8. Woodworth, Contemporary Schools of Psychology, Sterling Publishers, New Delhi, 1984.

Supplementary Reading

1. YogendraK.Sharma, Educational Psychology, Kanishka publishers, 2004.
2. Kuppusamy.B, Advanced Educational Psychology, Sterling Publishers, New Delhi, 1984.
3. UdayShankar, Advanced Educational Psychology, Oxomian Press, New Delhi, 1984.
4. Aggarwal.J.C, Psychology and learning and development, Shipra publications, New Delhi, 2005.
5. Tara Chand, Modern Child Psychology, Anmol Publications, New Delhi, 1997.

Course Outcomes

The student teacher should be able to

CO1:   comprehend the educational psychology and its methods
CO2:   differentiate between heredity and environment as well as growth and developmental stages of an individual
CO3:   explain the theoretical perspectives on learning
CO4:   differentiate the cognitive abilities among learners
CO5:   provide guidance and counseling for different types of children

Outcome Mapping

CO/ PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PS O1	PS O2	PS O3	PS O4	PS O5
CO1							2				3				
CO2			3	3								3			
CO3						3						2			
CO4						2								3	
CO5								2				2			

Year-I (2019-2020)19BEDC10: BEDC103: Schooling, Socialisation and Identity   Credits : 4

<div align="right">Hours : 4</div>

Learning Objectives (LO): The student teachers
- acquire knowledge of the process of socialization at home and school that act as shaping factors in identity formation.
- Understands the factors that shape identity formation and influence a sense of self.
- understands the processes that have shaped one's own sense of identity as 'student'.
- become aware of 'self' and 'identity' and free oneself through self understanding.
- understandsone's aspirations and possibilities in order to develop a growing sense of agency as a teacher, a professional and a human being.

Unit-1: Socialisation and Education
Meaning of Socialisation- Importance and Objective of Socialisation- Charactertics of the process of Socialisation.

Unit-2: Social Institutions
Family as a social institution- Parenting Styles and their impact; parental expectations and values. Community and socialization – Neighbourhood, extended family, Religious group and their socialization functions. School as a social institution; value formation.

Unit-3: Development of Self
Various dimensions of self – Self concept, Self – esteem, Self-efficacy, Self Control and Self – Confidence.

Unit-4: Development of Identity
Impact of socialization on developing self-interface between home, community and school. Interlinkages within wider socio-cultural contexts.

Unit-5: Identity formation
Emergence of multiple identities in the formation of a person – Social and institutional contexts; Need for inner coherence; Managing conflicting identities.

Unit-6: Identity formation in individuals and groups
Determinants – Social categories – Caste, class, Gender, Religion, Language and Age. Technology and Globalisation on identity formation.

Unit-7: Establishing Identity in a Real World
Peer group influence to media messages; Peer relations – Competitions, Co-operation and Peer pressure; Role of teacher in establishing identity with respect to media and peer relations.

Unit-8: Schooling and Identity formation
Process of identity formation – ascribed, acquired and evolving; school as a site – Teacher and students, school culture and ethos; Teaching- Learning practices; Teacher discourse in the classroom ; Evaluation practices, value system and hidden curriculum; Role of school in developing national, secular and humanistic identities.

Unit-9: Assertion of Identities
Oppression, Conflict and Violence; Peace through education; Role of education for peaceful living.

Unit-10: Evolving an Identity as a Teacher

Impact of socialization process; shifting identities as 'Student' 'adult' and 'student teacher'. Influences acting on oneself; one's own aspiration and efforts to become a teacher. Evolving an identity for reconstruction. Professional identity.

For Fast Track Learners

Parent-Teachers Association: Importance and Role –Religion Integrity-Tolerance - Students' community services- Identity.

Practical Work:

- Write a report on your parental expectation and parental styles.
- Give a report on the determinants of identity formation of an individual.
- Role of School in developing secular and humanistic identities.
- Peer group influence to media messages.
- Role of education for peaceful living.

Text Books

1. Bhatia.H.R. (1973), Elements of Educational Psychology, New Delhi, Orient Longman.
2. Biggie.M.L. (1982), Learning theories for Teachers, New York, Harper and Row Publishers.
3. Chauhan.S.S (1978), Advanced Educational Psychology, Vikas publishing House Pvt., Ltd. New Delhi.
4. Dash.B.N. (2004), Trends and issues in Indian Education, New Delhi, Dominant publishers.

Supplementary Reading

1. Kundu.C.L. and Tutoo.D.N. (1993) Educational Psychology, Delhi, Sterling publishers.
2. Mangal.S.K (1984), Psychological foundations of Education, Ludhiana, Prakash publishers.

Course Outcomes

The student teacher should be able to

CO1: explain the process of socialization
CO2: analyze the influence of various social institutions
CO3: differentiate the dimensions of the self
CO4: identify the impact of socialization
CO5: evolve an identity for a teacher

Outcome Mapping

CO/ PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PS O1	PS O2	PS O3	PS O4	PS O5
CO1								2						2	
CO2				3									2		
CO3							3	3							3
CO4								3						2	
CO5															3

BEDO111 - PEADAGOGY OF TAMIL (PART-I)

Credits:4

Hours: 4

நோக்கங்கள்:

1. மாணவர்கள் தாய்மொழியின் இன்றியமையாமையும்,தாய்மொழிகற்றலின் நோக்கங்களையும் அறிதல்.
2. மாணவர்கள் செய்யுள்,உரைநடைப் பாடம்,கற்பிக்கும் முறைகளைப் புரிந்துகொள்ளுதல்.
3. மாணவர்கள் இலக்கணம் கற்பிக்கும் இனியமுறைகளைக் கற்றுபயன்படுத்தஆர்வம் கொள்ளல்.
4. மாணவர்கள் பாடத்திட்டம் எழுதுதல்,நுண்ணிலைப் பயிற்சிமேற்கொள்ளுதல் மூலம் விருப்பார்வம் ஏற்படுத்துதல்.

அலகு-1

தாய்மொழிகற்பித்தலின் நோக்கங்கள் - பயன்கள் - எண்ணத்தைவெளியிடும் கருவி– திருத்தமாகபேச,எழுத,வாசிக்க–கற்பனையாற்றலைவளர்த்தல் - அழகுணராற்றலைவளர்த்தல் - சமூகப் பண்பாட்டுமரபினைஅறியும் கருவி–வாழ்க்கைநடத்தத் தேவையானதிறன்களைப் பெறுதல்.

அலகு-2

மொழி–தோற்றம் - இயல்பு–முக்கியத்துவம் - தமிழ் மொழிவரலாறு–தமிழ் இலக்கணவரலாறு– தமிழ் இலக்கியவரலாறு–உயர்தனிச் செம்மொழி - இயல்புகள் - பண்புகள் - தமிழின் தகுதிகள் - செம்மொழி இலக்கியங்கள் செம்மொழி இலக்கியங்களில் கல்வியின் சிறப்புகள்.

அலகு-3

செய்யுள் கற்பித்தல் - நோக்கங்கள் - பயன்கள் - கற்பிக்கும் முறைகள் - பல்வேறுதொடங்குமுறைகள் - பல்வேறுவயதினருக்குஏற்றபடிசெய்யுள் கற்பிக்கும் முறைகள் - உணர்வுகளைபிரதிபலித்தல் - தமிழ் இலக்கியங்களைப் பயிலஊக்கப்படுத்துதல் - இலக்கியநயம் பாராட்டல்.

அலகு-4

உரைநடைகற்பித்தல் - நோக்கங்கள் - கற்பிக்கும் முறைகள் - சொற்களஞ்சியப் பெருக்கம் உண்டாக்கல் - பல்வேறுநடைஅமைப்புகளைஅறிமுகப்படுத்துதல்,சுவைக்கச் செய்தல்,எளிய,பிறமொழிகலப்பில்லாதநடையைஅறிந்துபாராட்டல்.

அலகு-5

இலக்கணம் கற்பித்தல் - தேவை,முக்கியத்துவம்,பயன்கள் - நடைமுறை இலக்கணம் - ஒழுங்குமுறை இலக்கணம். நூற்பாக்களின் பயன்கள் - இலக்கணம் கற்பித்தலின் விதிவரைமுறை– விதிவிளக்குமுறை–விளையாட்டுமுறை, இலக்கணம் கற்பித்தலில் புதுமைபுகுத்துதல்.

அலகு-6

கல்விஏற்பாடு–சிறந்தபாடநூல்களைத் தயாரிக்கும் போதுமனதில் கொள்ளத்தக்கசெய்திகள் - நல்லபாட நூலில் அமையவேண்டியநற்பண்புகள் - பாடநூலின் ஆக்கக் கூறுகளும்,தேக்கக் கூறுகளும் தமிழ்ப் பாட நூல்களைப் பற்றியமதிப்பீடு.

அலகு-7

மொழியாசிரியர் - கல்வித் தகுதி–பயிற்சி–பண்புநலன்கள் - மொழிப்பற்று - இலக்கிய இலக்கணபுலமை–எடுத்துக் கூறும் ஆற்றல் - உள்ளங்களைஒன்றாக்கி இணைத்தல்,கலையார்வம் மிக்கவர் - பருவமறிந்துபயிற்றும் பண்பினர் - மாணவருக்குநல்லமுன் மாதிரியாகவிளங்குதல் - பணிமுன் பயிற்சிகள் மற்றும் பணியிடைப் பயிற்சிகள்.

அலகு-8

பாடத்திட்டம் தயாரித்தலின் இன்றியமையாமை. நன்மைகள் - தீமைகள் - ஆசிரியர் மனதில் கொள்ளத்தக்கபெஞ்சமின் கற்பித்தல் கோட்பாடுகள் - நுண்ணியைக் கற்பித்தல் - பல்வகைத் தூண்டல்களைப் பயன்படுத்தும் திறன் - கிளர் வினாத்திறன் - வலுவூட்டிகளைப் பயன்படுத்தும் திறன் - கரும்பலகையைப் பயன்படுத்தும் திறன் - இத்திறன்களில் பயிற்சிபெறுதல்.

அலகு-9

கலைப்புலசெவிப்புலதுணைக் கருவிகள் - எளியவகுப்பறைகருவிகள் - பொருட்கள் - படங்கள் - மாதிரிகள் - கரும்பலகை–வரைபடங்கள் - மின் அட்டைகள் - சுழல் அட்டைகள் - கணிப்பொறியைசிறந்தகற்பித்தல் துணைக்கருவியாகப் பயன்படுத்துதல்.

அலகு-10

இணையதளவசதிகள் - தேடுபொறிகள் - இணையம் வழி தகவல்களைதிரட்டுதல் - கணிப்பொறி வழி காட்சிப்படுத்திதிரையிடல் மின்னணுசாதனங்களைப் பயன்படுத்திகற்பித்தல். இணையதளத்துடன் இணைந்துள்ளபடிப்புகள் - உலாபேசிவழிகற்றல் - சுயம் இணையதளவழிப் படிப்புகள் - துரிததுலங்கல் குறியீடு (ஞுசு ஊழனந — ஞரஉைம சுநளிழளெந ஊழனந).

மீ திறீ ழை தைகீ ீ கானதமீ கீ பீீ ீ ீ றைகீ

செய்யுட் பாடங்களைக் கற்பிப்பதற்குபழையதிரைப்படக் காட்சிகளைப் பயன்படுத்துதல். தமிழ்ப்பாடத்தை'ஸ்மார்ட் போர்டு'-ஐப் பயன்படுத்திக் கற்பிக்கப் பயிற்சியளித்தல்.

செய்முறைப் பயிற்சி:

1. ஏதேனும் ஒருபாடத்தைமின்னணுசாதனங்களை பயன்படுத்திகற்பிக்கவரைவுத் திட்டம் தயாரித்துகற்பித்தல்.

கற்றல் வெளிப்பாடுகள்

இப்பாடத்தைபயிலுவதன் மூலம் மாணவஆசிரியருக்கு

❖ தாய் மொழியின் முக்கியத்துவம்,தாய் மொழிக் கல்விகுறித்தஅறிவுகிடைக்கின்றது.
❖ செய்யுள்,உரைநடைகற்பிக்கும் முறைகளைஉரைரமுடிகின்றது.
❖ இலக்கணம் கற்பித்தலின் மீதானஆர்வம் அதிகமாகின்றது.
❖ நுண்ணிலைக் கற்பித்தல்,வகுப்பறைக் கற்பித்தலுக்குரியபாடத் திட்டங்களைஎழுதிஅதில் பயிற்சிபெறுவதன் மூலம் கற்பித்தல் ஆர்வம் அதிகரிக்கின்றது.

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4	PSO5
CO1		3									2				
CO2			2										2		
CO3						3									2
CO4						2								2	
CO5													3		

பார்வை நூல்கள்:

1. இலக்குவன், 2008,தமிழ்ப் பாடநூலும் ஆசிரியரும்,சாரதாபதிப்பகம்,சென்னை.
2. விஜயலட்சுமி. வ, 2007,நுண்ணிலைக் கற்பித்தல்,சாரதாபதிப்பகம்,சென்னை.
3. கணபதி, வி. 1977,நற்றமிழ் கற்பிக்கும் முறைகள் பகுத்தல்இ சாந்தாபப்ளிஷர்ஸ்,சென்னை.
4. கணபதி, வி. 1977,ஐவகைப் பாடங்களும் கற்பித்தலும்,சாந்தாபப்ளிஷர்ஸ்,சென்னை.
5. சுப்புரெட்டியார். இரா. 2001,தமிழ் பயிற்றும் முறை,மணிவாசகர்,பதிப்பகம்,புதுத்தெரு,சிதம்பரம்.

I. Learning Objectives (LO): The student teachers
- acquire the knowledge of the concepts, terms and procedures in the pedagogy of English.
- understand the concepts, terms and procedure in the content and methodology of teaching English.
- use the knowledge in actual classroom situations.
- develop interest in various activities pertaining to teaching and learning of English.
- develop interest in knowing recent developments in content and methodology of teaching English.
- develop positive attitude towards teaching and learning of English.
- appreciate the contribution of English language to the process of teaching and learning.

Unit-1 : Teaching of Content

Subject matter of VI to X Standard English textbooks prescribed by Tamilnadu government from time to time.

Unit-2: Nature and Scope of Language

Language - Concept - Meaning - Nature - Scope - Functions - Principles.

Unit-3 : Language Skills

Four basic skills - Listening - Speaking - Reading - Writing - classification of skills - interdependence of skills.

Unit-4 : Aims of Teaching English

Aims of teaching English in India at Secondary Level - General Abilities to be developed.

Unit-5 : Objectives of Teaching English

Specific Instructional objectives - Four Fold Objectives - application of Bloom s Taxonomy - and specific learning outcomes at Secondary Level.

Unit-6: Place of English in India

Role and Importance of English language - English in Indian education -Pre-Independence period - Post Independence Period - Problems of teaching English in India.

Unit-7 : Language Curriculum

Concept - Principles - steps - advantages - limitations - place of English in Indian school curriculum - language textbook - qualities.

Unit-8: Methods of Teaching English

Translation Method - Direct Method - Substitution Method - Bilingual Method - Meaning - Principles - Merits and Demerits.

Unit-9 : Approaches of Teaching English

Structural Approach - Situational Approach - Meaning - Principles - Merits and Demerits.

Unit-10 : Microteaching Technique and Teaching Skills

Meaning - Definition - Principles - Procedure - Microteaching Cycle - Microteaching Skills - Skill of Questioning - Reinforcement - stimulus Variation.

For Fast Track Learners

English teacher – a resource person – Co - learner – Share holder – an organizer – a controller – Prompter – an assessor – student grouping - Ability grouping – Cluster grouping – heterogeneous grouping - Homogenous grouping – Advantages of grouping – indiscipline – Cause - Cure

Practical Work

- Write a critical analysis of a language textbook.

- Prepare a scrap book focusing on ELT.

- Prepare a match stick album for teaching various grammar items.

- Prepare a picture album to teach vocabulary.

- Write a summary of one your favorite works of A.P.J.Kalam

Text Books

1. Ambedkar, V (2011) Teaching of English in Indian Context, Orathanadu: Annaveera Publishers
2. Anne, V.K., 2001. Methods of Teaching English. Hyderabad: New Era Publications.
3. Baruah, T.C., 2006. The English Teachers Handbook. New   Delhi: Sterling Publishers.
4. Close, R.A., 1999, English as a Foreign Language. London: Longman.
5. Dash, B.N., 2007. Teaching of English .. New Delhi: Dominant Publishers
6. Halliday, M .A.K.,   1998. Language as a Social Semiotic. Lcno on: Arnold Publications.
7. Jack, Richards, 2012. Approaches and Methods in Language Tear-nig. London: Cambridge
8. Jindal, D.V., 2008. An Introduction to Linguistics. New Delhi: Pre;ceHall.Krishna Babu, S., et.al. 2009. Reading Disabilities. New Delhi: Soi. 'U.Kohli, A.L(2006) Techniques of Teaching English. New Delhi:Uhanapat Rai Publications.
9. Kishnaswamy, N., 2005. Teaching of English Grammar. Chennai: T.R.Publications.
10. Mowla, Shaikh, 2006. Techniques of Teaching English. Hyderabad: Neelkamal.

Supplementary Reading

1. Pahuja, N.P., 2009. Teaching of English. New Delhi: Anmol Publications.
2. Swan, Michael, 2002. Practical English Usage. Oxford: OUP.
3. Venkateswaran, S., 2011. Principle of Teaching English. New Delhi: Vikas Publishing House.
4. Vallabhi, J.E., 2012. Teaching of English II: Principles and Practices. Hyderabad: Neekamal.

Course Outcomes

The student teacher should be able to

CO1: acquire the knowledge of the concepts, terms and procedures in pedagogy of English.
CO2: understand the aims and objectives of teaching English in India at various levels
CO3: comprehend the role and importance of English language
CO4: develop interest in language curriculum
CO5: design, implement and evaluate unit plans and lesson plans.

Outcome Mapping

CO/ PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PS O1	PS O2	PS O3	PS O4	PS O5
CO1	2										3				
CO2								3			2				
CO3							2						2		
CO4						2								2	
CO5										3					

Learningobjectives (LO): The student teacher
- acquires Knowledge of the aims and objectives of Mathematics
- understands the Nature and Scope of Mathematics, the principles of curriculum construction and Organization of subject matter, psychology of learning mathematics
- applies the knowledge in interaction of analysis in actual class room situation and teaching strategies
- develops skill in effective communication
- develops interest in knowing dynamic methods of teaching mathematics.
- develops positive attitude towards the teaching and learning.
- appreciates the contribution of the subjects to the teaching and learning.

Unit -1:
Mathematics Subject Matter Specified in Standard XI to XII in Mathematics Syllabus byTamilnadu Government from time to time respectively.

Unit- 2: Nature And Scope
Nature of Mathematics – History of Mathematics – Contribution of Indian Scientists Mathematics, Scope of Mathematics. Correlation of Mathematics with Different Subjects.

Unit -3: Aims And Values Of Teaching Mathematics
Important Aims Of Teaching Mathematics at Higher Secondary Level –Values Of Mathematics-Intellectual, Practical, Disciplinary, Moral, Cultural, social And Aesthetic.

Unit- 4: Objectives Of Teaching Mathematics
General and Specific Objectives of Teaching Mathematics- Bloom's Taxonomy of Educational Objectives (Cognitive, Affective and Psychomotor Domains).- Objectives of Teaching Mathematics at Different Levels-Primary, Secondary, Higher Secondary.

Unit- 5: Curriculum
Learning theory foundation for instructional design- Task analysis- Content analysis-Recent Trends in Curriculum Development –Student –Subject and Environment Oriented Approaches-Curriculum Development and Improvement Practices in India

Unit- 6: Psychological Basis Of Teaching Mathematics
Psychology Of Learning Mathematics – Gagne's Types of Learning, The Ideas of Piaget and Psychological Aspects- Models of Teaching – Significance Of Models – Components. Models Developed by Bruner, Ausubel and Suchman– Advantages and Disadvantages- Dewey's Contribution-Dalton Plan.

Unit -7: Mathematics Text Book
Text Book – Characteristics – Appropriate Use of It – Uses of Text Book – Importance of Text Book – Difference between work books and text books.

Unit- 8: Classroom Climate
Class Room Climate-Authoritarian – Laize Faire and Democratic Climates- Borich three types of classroom climate competitive, cooperative and individualistic types – Components of classroom management, 1.Management of the Physical Environment 2. Management of learning 3. Management of classroom rules 4. Management of the Discipline- Strategies of classroom management

Unit -9: Effective Communication

Principles of communication-Modes of communication- classroom communication-Communication And Interaction–FIAS – Coding And Analysis – Effects Of Analysis – Teaching Strategies-Guided Discovery, Exposition, Discovery Learning, Investigation- Think Aloud.

Unit -10: Dynamic Methods of Teaching

Dynamic Methods Of Teaching – Seminar, Symposium, Discussion, Panel Discussions, Workshops–Debates (Formal)- Debate (Informal) by Students – Merits And Demerits. Group Dynamics Techniques- Buzz Sessions, Group Discussions.

For Fast Track Learners

Technology based tools-Mobile learning- Preparation of Video lessons- Digital Classroom- Innovative Digital teaching

Practical Works

- Organisation and Participation of Class Room Seminars by the student teachers.
- Practicing FIAS, Coding, Analysising and preparing report on the Effects Of Analysis in the classroom
- Observing Class Room Climate during teaching practice programme and preparing a report.
- ArrangingGroup Discussions for identifying and removing the problems in teaching and learning process.
- AnalysingText Books of the class allotted during teaching practice

Text Books

1. Ball, W.N.R., (1893)A Short History of Mathematics, Mac.Milan, New York
2. Baur, George, R.R. Geeorge, *Linda Olsen(*1976)*Helping Children Learning*
3. *Mathematics,* Cunnings Publishing Company, Inc.
4. Bell, E.T.,(1952) *Mathematics*, Queen and Servant of Sciences, McGraw Hill, NewYork.
5. Sudhir Kumar, (1993), *The Teching of Mathematics, Anmol Publications,* , New Delhi

Supplementary Reading

1. Sidhu, Kulbra,(1987) *The Teching of Mathematics*, Sterling Publishers, New Delhi.
2. Anice James, (2011) Skills& Strategies of Teching of Mathematics, Neelkamal publications, Hyderabad

Course Outcomes

The student teacher should be able to

CO1:	acquire the basic knowledge about the aims and objective
	of teaching Mathematics at higher secondary level.
CO2:	understand thevalues,curriculum construction and psychological basic ofMathematics teaching
CO3:	apply the scientific knowledge toidentify the suitability of various teaching methods.
CO4:	develop skills in effective communication in Mathematics
CO5:	make the special qualities of agood mathematics teacher,

Outcome Mapping

CO/ PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PS O1	PS O2	PS O3	PS O4	PS O5
CO1		2									2				
CO2								2				2			
CO3							3							2	

CO4				2												**2**
CO5			2												**2**	

Learning Objectives (LO): The student teacher
- acquires knowledge of the aims and objectives of teaching Physics
- understands the nature and scope of Physics, the principles of curriculum construction and organization of subject matter, psychology of learning Physics and the qualities of good Physics teacher
- applies the scientific knowledge to analyse the class room situation and teaching strategies
- develops skill in effective communication in Physics
- develops interest in knowing dynamic methods of teaching Physics
- develops scientific attitude towards the teaching and learning of Physics
- appreciates the contribution of the Physics subject to his/her daily life

Unit- 1

Physics subject matter specified in higher secondary syllabus prescribed by Tamilnadu Government from time to time respectively.

Unit- 2: Nature and Scope

Nature of Physics – History of Physics – Contribution of Indian scientists to Physics – Scope of Physics – Correlation of Physics with different subjects.

Unit- 3: Aims and Values of Teaching Physics

Important Aims of Teaching Physics at higher secondary level –Values of teaching Physics.

Unit -4: Objectives of Teaching Physics

General and specific objectives of teaching physics – Bloom's taxonomy of instructional objectives (cognitive, affective and psychomotor domains) – Objectives of teaching Physics at higher secondary level.

Unit -5: Curriculum

Recent trends in physics curriculum development – Student, Subject and Environment oriented approaches-Curriculum development and improvement practices in India

Unit -6: Psychological Basis of Physics Teaching

Psychology of learning physics – Gagne's models of sequential learning – Piaget's intellectual development and Bruner's models of concept attainment and its educational importance

Unit -7: Physics Text Book

Science text book – Importance and characteristics –Content analysis of physics text book at higher secondary level – Organisation of subject matter – Evaluation of science text book

Unit -8: Classroom Climate

Concept of class room climate – Need for creating suitable class room climate for learning physics – Authoritarian, Laize Faire and Democratic type of class room climates – Borich's three types of classroom climate competitive, cooperative and individualistic class room climate.

Unit -9: Effective Communication

Class room communication – Modes of communication- Types of Communication – Barriers affecting communication and Interaction Analysis – FIAS

Unit -10: Dynamic Methods of Teaching and Learning

Seminar, Symposium, Discussion, Panel Discussion, Workshop–Brain –storming – Debates on current issues by Students from class – Merits and Demerits – Cooperative Learning, Mastery Learning and Experiential Learning – Environmental based learning of physics.

For Fast Track Learners

Analyze the recent Nobel winners' achievement in Physics- Physics Research centers in India-Correlate Physics with day to -today events-prepare e-lesson for Physics Teaching.

Practical Works

- Organisation and Participation of Class Room Seminars.
- Practicing FIAS, Coding, Analysing and preparing report on the effects of analysis in the classroom
- Observing Class Room Climate during teaching practice programme and preparing a report.
- ArrangingGroup Discussions for identifying and removing the problems in teaching and learning process.
- AnalysingText Books of the standard allotted during teaching practice programme.
- Any five experiments in Physics.

Text Books

1. Saunders, A.N. (1955). Teaching of General Science in Tropical Secondary School, Printed in Great Britain by Butter and Taunen Limited, London
2. Sharma, P.C. (2006). Modern Science Teaching, DhanpatRai Publications, New Delhi.
3. Pandey, (2003).Major Issues in Science Teaching, Sumit Publications, New Delhi.
4. Yadav, M.S. (2003). Teaching of Science, Anmol Publications. New Delhi.
5. Gupta, S.K. (1985). Teaching of Chemistry in Secondary Schools, Sterling Publication (Pvt.) Limited.
6. Heiss, Obourn& Hoffman (1985). Modern Science in Secondary Schools, Sterling Publication (Pvt.) Limited.
7. Sharma, R.C. (1985). Modern Science Teaching, DhanpatRai and Sons.
8. Edgar Dale, Audio-Visual Methods in Teaching, Revised Edition, Thy Dryden Press, New 32eal.
9. SiddifitSiddiqi, (1985).Teaching of Science Today and Tomorrow, Doals House.
10. PannerSelvam, A. (1976).Teaching of Chemistry (Tamil), Government of Tamil Nadu.
11. Nair, C.P.S. (1971). Teaching of Science in our Schools, Sulthan Chand & Co. (Pvt.) Limited.

Supplementary Reading

1. Joseph, (1966).The Teaching of Science, Harvard University Press.
2. Newbury N.F., Teaching of Chemistry in Tropical Secondary Schools, Oxford University Press.
3. Thurber, Walter, A., and Collettee, Alfred, T. (1964).Teaching Science in Today's Secondary School, Prentice Hall of India Pvt. Ltd.
4. Boulind, H.E., (1972) The Teaching of Physics in Tropical Secondary School, Oxford University, London.

5. Newbur, N.F., (1983) Teaching of Physical science in Tropical Secondary Schools, Oxford University Press, London.

Course Outcomes

The student teacher should be able to

CO1: acquire the basic knowledge about the aims and objectives of teaching physics at higher secondary level.

CO2: understand the values , curriculum construction and psychological basic of physics teaching

CO3: apply the scientific knowledge to identify the suitability of various teaching methods.

CO4: develop skills in effective communication in physics

CO5: develop interest in knowing more about the dynamic methods of teaching and learning physics

Outcome Mapping

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	2										2				
CO2										2				2	
CO3			2											2	
CO4					3										3
CO5			2											2	

Learning Objectives (LO) : The student teacher
- acquires knowledge of the aims and objectives of teaching Chemistry
- understands the nature and scope of Chemistry, the principles of curriculum construction and organization of subject matter, psychology of learning Chemistry and the qualities of good Chemistry Teacher
- applies the scientific knowledge to analysis the class room situation and teaching strategies
- develops skill in effective communication
- develops interest in knowing dynamic methods of teaching Chemistry
- develops positive attitude towards the teaching and learning Chemistry
- appreciates the contribution of the Chemistry subject to his/her daily life

Unit -1
Chemistry subject matter specified in higher secondary syllabus prescribed by Tamilnadu Government from time to time respectively.

Unit -2: Nature and Scope
Nature of Chemistry – History of Chemistry – Contribution of Indian scientists to Chemistry – Scope of Chemistry – Correlation of Chemistry with different subjects.

Unit -3: Aims and Values of Teaching Chemistry
Important Aims of Teaching Chemistry at higher secondary level –Values of teaching Chemistry.

Unit -4: Objectives of Teaching Chemistry
General and specific objectives of teaching chemistry – Bloom's taxonomy of instructional objectives (cognitive, affective and psychomotor domains) – Objectives of teaching chemistry at higher secondary level.

Unit -5: Curriculum
Recent trends in chemistry curriculum development – Student, Subject and Environment oriented approaches-Curriculum development and improvement practices in India.

Unit -6: Psychological Basis of Chemistry Teaching
Psychology of learning chemistry – Gagne's models of sequential learning – Piaget's intellectual development and Bruner's models of concept attainment and its educational importance

Unit -7: Chemistry Text Book
Science text book – Importance and characteristics –Content analysis of chemistry text book at higher secondary level – Organisation of subject matter – Evaluation of science text book

Unit -8: Classroom Climate
Concept of class room climate – Need for creating suitable class room climate for learning chemistry – Authoritarian, Laize Faire and Democratic type of class room climates –

Borich's three types of classroom climate competitive, cooperative and individualistic class room climate.

Unit -9: Effective Communication

Class room communication – Modes of communication- Types of Communication – Barriers affecting communication and Interaction Analysis – FIAS.

Unit -10: Dynamic Methods of Teaching and Learning

Seminar, Symposium, Discussion, Panel Discussion, Workshop–Brain –storming – Debates on current issues by Students from class – Merits and Demerits – Cooperative Learning, Mastery Learning and Experiential Learning – Environmental based learning of chemistry.

For Fast Track Learners

Process and product approaches in teaching of chemistry-Role of chemistry education in the protection of environment-constructivist approach in chemistry education-Innovative techniques in teaching chemistry-Flipped learning in chemistry: concept and its advantages- Experiential learning in chemistry: concept and its advantages-Social utilities of chemistry education.

Practical Works

- Organisation and Participation of Class Room Seminars.
- Practicing FIAS, Coding, Analysing and preparing report on the effects of analysis in the classroom
- Observing Class Room Climate during teaching practice programme and preparing a report.
- ArrangingGroup Discussions for identifying and removing the problems in teaching and learning process.
- AnalysingText Books of the standard allotted during teaching practice programme.

Text Books

1. Saunders, A.N. (1955). Teaching of General Science in Tropical Secondary School, Printed in Great Britain by Butter and Taunen Limited, London
2. Sharma, P.C. (2006). Modern Science Teaching, DhanpatRai Publications, New Delhi.
3. Pandey, (2003).Major Issues in Science Teaching, Sumit Publications, New Delhi.
4. Yadav, M.S. (2003). Teaching of Science, Anmol Publications. New Delhi.
5. Gupta, S.K. (1985). Teaching of Chemistry in Secondary Schools, Sterling Publication (Pvt.)Limited.
6. Heiss, Obourn& Hoffman (1985). Modern Science in Secondary Schools, Sterling Publication (Pvt.) Limited.
7. Sharma, R.C. (1985). Modern Science Teaching, DhanpatRai and Sons.
8. Edgar Dale, Audio-Visual Methods in Teaching, Revised Edition, Thy Dryden Press, New 35eal.
9. SiddifitSiddiqi, (1985).Teaching of Science Today and Tomorrow, Doals House.
10. PannerSelvam, A. (1976).Teaching of Chemistry (Tamil), Government of Tamil Nadu.

Supplementary Reading

1. Nair, C.P.S. (1971). Teaching of Science in our Schools, Sulthan Chand & Co. (Pvt.) Limited.
2. Joseph, (1966).The Teaching of Science, Harvard University Press.
3. Newbury N.F., Teaching of Chemistry in Tropical Secondary Schools, Oxford University Press.
4. Thurber, Walter, A., and Collettee, Alfred, T. (1964).Teaching Science in Today's Secondary School, Prentice Hall of India Pvt. Ltd.

Course Outcomes

The student teacher should be able to

CO1: acquire the basic knowledge about the aims and objectivesof teaching Chemistry at higher secondary level.

CO2: understand the values , curriculum construction and psychological basic of Chemistry teaching

CO3: apply the scientific knowledge to identify the suitability of various teaching methods.

CO4: develop skills in effective communication in Chemistry

CO5: develop interest in knowing more about the dynamic methods of teaching and learning Chemistry

Outcome Mapping

CO/ PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PS O1	PS O2	PS O3	PS O4	PS O5
CO1	2										2				
CO2										2				2	
CO3			2											2	
CO4					3										3
CO5			2											2	

BEDO116: Pedagogy of Zoology –[Part-1]   Credits : 4

Hours   : 4

Learning Objectives (LO): The student teacher
- acquires thorough knowledge of topics in Zoology taught in higher secondary schools and the latest development.
- understands the importance of zoology in the modern age and the need for the teaching of zoology in schools.
- understands the aims and values of teaching zoology
- understands the objectives of teaching zoology at various levels and especially at higher secondary level need and importance of zoology curriculum and its approaches.
- applies psychological basis of teaching zoology at higher secondary level.
- applies the principles of curriculum in the organization of content in zoology
- understands modern trends in the instructional methodology and dynamic methods of teaching zoology.
- develops skills in
  - teaching zoology at higher secondary level
  - preparing, and using the appropriate instructional materials in teaching zoology.
  - preparing zoology curriculum

Unit-1: Zoology Content
Zoology subject matter of higher secondary syllabus prescribed by Tamilnadu Government from time to time.

Unit-2: Nature and Scope of Teaching Zoology
Definition and meaning of Zoology – Historical overview- The great Zoologists-The significant discoveries and inventions- Serendipity.

Unit- 3: Aims and Values of Teaching Zoology
Aims of teaching Zoology at higher secondary level- Values of teaching Zoology.

Unit-4: Objectives of Teaching Zoology
Objectives of teaching Zoology at higher secondary level- Objectives of teaching biology with special reference to Bloom's taxonomy- Instructional objectives and specifications of teaching Zoology- Objective based instruction.

Unit-5: Zoology Curriculum
Recent trends in Zoology curriculum development- Various approaches such as, student, subject and environmental oriented approaches- Curriculum development and improvement practices in India.

Unit-6: Psychological Bases of Teaching Zoology
Contributions of Piaget- Stages of intellectual growth-Gagne's models of sequential learning- Bruner's model of concept learning- their Implications in teaching of Zoology.

Unit-7: Zoology Text Book

Importance of text books for learning zoology- Functions and characteristics of zoology text book-Content analysis of zoology text book at higher secondary level – Organisation of subject matter- Principles of content analysis.

Unit-8: Class Room Climate

Concept of class room climate-Need for creating suitable class room climate for learning zoology-Different class room climate such as Authoritarian class room climate, Laizee fair class room climate and democratic class room climate.

Unit-9: Effective Communication

Theories communication- Types of communication-Class room communication-Barriers affecting communication-Interaction analysis- FIACS.

Unit-10: Dynamic Methods of Teaching and Learning Zoology

Team teaching- Group discussion- Seminar- Symposium-Panel discussion-Brain storming- their implications on teaching zoology. Experimental leaning- mastery learning-Environmental based zoology learning.

For Fast Track Learners

Enhancement the Teaching and Learning Methods of Some Zoological Courses Invertebrate, Parasitology, Anatomy and Animal Physiology- Visual Representation of Lesson Content Structure

Practical works

- Prepare a document on life and contributions of eminent Zoologists.
- Read and reflect on higher secondary text book of zoology and find out to what extent they satisfy the national and global requirements.
- Prepare an e-assignment on the relevance of Learner Centered approach in zoology curriculum development.
- Conduct a seminar on any one topic in zoology subject at higher secondary level and prepare an report.
- Observe the teaching and learning process at higher secondary level and prepare a report regarding the class room climate maintained by the zoology teacher.

Text Books

1. Ameeta, P.,(2005). Methods of Teaching Biological Science. Hydrerabad: Neelkamal Publications Prt.Ltd.
2. Bhatt, B. D., Sharma S.R., (1996). Methods of Teaching Science. Delhi: Kanishka Publishing House.
3. Bloom, B.S. (Ed.), Engelhart, M.D., Furst, E.J., Hill, W.H., & Krathwohl, D.R., (1956). Taxonomy of Educational Objectives: The Classification of Educational Goals. Handbook 1: Cognitive Domain. New York: David McKay
4. Choudhary, S., (2004). Teaching of Biology. New Delhi: APH Publishing Corporation.
5. Cronbach, L. J. & Snow, R. E., (1977). Aptitude and Instructional Methods. New York: Irvington Publishers.
6. Das, R.C., (1985). Science Teaching in Schools. New Delhi: Sterling Publishers.
7. Dave, R.H., (1970). Psychomotor Levels. In R.J. Armstrong (Ed.), Developing and Writing Educational Objectives (pp. 33-34). Tucson AZ: Educational Innovators Press.
8. Deepak Dayal, Richa Bhatt and Biswajit Ray,(2007). Modern Methods of Teaching Biology. New Delhi: APH Publishing Corporation.
9. Harrow, A.J., (1972). A Taxonomy of the Psychomotor Domain: A Guide for Developing Behavioral Objectives. New York: David McKay.
10. Joyce, B., & Weil, M., (2000). Models of Teaching (6th ed.), Boston: Allyn and Bacon.
11. Krishanamacharyulu,V., (2011). Science Education. Hyderabad: Neelkamal Publications pvt.Ltd,.

12. Lakshmi Gadde, Bhuvaneswara, (2003). Methods of Teaching Life Sciences. New Delhi: Discovery publishers.
13. Malhotra,V., (2007). Encyclopaedia of Modern Methods of Teaching Science. New Delhi: Crescent Publishing Corporation.
14. Mujibul Hasan Siddiqui,(2007). Teaching of Science. New Delhi: APH Publishing Corporation.
15. Narendera Vaidya, (1999). Science Teaching for the 21st century. New Delhi: Deep&Deep Publication.
16. NCERT (1996). Science for Classes IX and X. New Delhi: NCERT Publications.
17. NCERT (2006). National Curriculum Framework for School Education 2005. New Delhi: NCERT Publications.
18. Passi, B. K., (Ed) (1976).Becoming Better Teacher: A Micro Teaching Approach. Ahamadabad: SahithyaMudranalaya Publishers.
19. Rajammal,K.,(2009). Methods of Teaching Biological Science. Chennai: Santha Publication,
20. Rajput, J. S. (ed.) (2002). Experiences in School Education. New Delhi: NCERT Publications.

Supplementary Reading

1. Schmeck, R.R., (1998). Learning Strategies and Learning Styles. New York: Plenum Press.
2. Sharma,R.C.,(2002). Modern Science Teaching. New Delhi: Dhanpat Rai Publishing Company(P) Ltd.
3. Sood, J. K., (1985). Teaching Life Sciences. Delhi: Kohli Publications.
4. Taylor D. J. and others, (2004). Biological Science. London: Cambridge university press.
5. Trowbridge, L. W. & Bybee, R. W., (1996). Teaching Secondary School Science.(6thed.). Englewood Cliffs. NJ: Prentice – Hall Inc.

Course Outcomes

The student teacher should be able to

CO1: acquire the basic knowledge about the aims and objectives of teaching Zoology at higher secondary level.

CO2: understand the values , curriculum construction and psychological basic of Zoology teaching

CO3: apply the scientific knowledge to identify the suitability of various teaching methods.

CO4: develop skills in effective communication in Zoology

CO5: develop interest in knowing more about the dynamic methods of teaching and learning Zoology

Outcome Mapping

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	2										2				
CO2										3				2	
CO3			3											2	
CO4					3										3

CO5		3											3	
CO6		2										2		

Year-I (2019-2020) **19BEDO117: Pedagogy of Botany –[Part-1]** Credits : 4

Hours : 4

Learning Objectives (LO): the student teacher
- acquires knowledge of the concepts, terms and procedures in the innovations, trends and approaches of teaching Botany.
- understands the
  - concepts, terms and procedures in the innovations, trends and approaches of teaching Botany.
  - maintaining suitable class room climate and effective communication for teaching Botany.
- applies the knowledge in actual classroom situations.
  develops skill in
  - various activities pertaining to teaching and learning.
  - teaching Botany at higher secondary level.
  - preparing, and using the appropriate instructional materials in teaching Botany.
  - preparing Botany curriculum
- develops interest in knowing recent development in the innovations, trends and approaches of teaching Botany.
- develops scientific attitude towards teaching and learning.
  - appreciates the contribution of the subject to the teaching and learning.

Unit –1: Botany Content
Botany subject matter of higher secondary syllabus prescribed by Tamilnadu Government from time to time.

Unit –2: Nature and Scope of Teaching Botany
Definition and meaning of Botany –Historical overview- The great Botanical scientists-   The significant discoveries and inventions –Serendipity.

Unit –3: Aim and Values of Teaching Botany
Aim of teaching Botany at higher secondary level –Values of teaching Botany.

Unit –4: Objectives of Teaching Botany
Objectives of teaching Botany –Instructional objectives for teaching Botany at higher secondary level – Instruction objectives and specifications of teaching Botany.

Unit –5: Botany Curriculum
Recent trends in Botany curriculum development –Various approaches such as, student, subject and environmental oriented approaches –Curriculum development and improvement practices in India.

Unit –6: Psychological Bases of Teaching Botany
Contributions of piaget –Stages of intellectual growth –Gagne's models of sequential learning –Bruner's model of concept learning –their Implications in teaching of Botany.

Unit –7: Botany Text Book

Importance of text books for learning Botany –Functions and characteristics of Botany text book – Content analysis of Botany text book at higher secondary level – Organisation of subject matter – Principles of content analysis.

Unit –8: Class Room Climate

Concept of class room climate – Need for creating suitable class room climate for learning Botany – Different class room climate such as Authoritarian class room climate, Laizee fair class room climate and democratic class room climate.

Unit –9: Effective Communication

Theories of communication – Types of communication –class room communication – Barriers affecting communication – Interaction analysis – FIACS.

Unit-10: Dynamic Methods of teaching and Learning Botany

Team teaching –Group discussion – Seminar –Symposium –Panel discussion – Brain storming – their implications on teaching Botany. Experimental leaning – mastery of Learning – Environment based Botany learning.

For Fast Track Learners

Preparation of botany curriculum – preparing a assignment on the contributions made by eminent Botanists.

Practical Works

- Prepare and submit a brief sketch of contribution of five botanical scientists.
- To conduct any five Experiments at higher secondary level.
- Submit a report about field visit to a Botanical garden.
- Prepare and submit five Herbarium specimens.
- Collect and submit any five medicinal plants and their uses.

Text Books

1. NarenderaVaidya,(1999), Science Teaching for the 21stcentury,Deep&Deep Publication, New Delhi.
2. Sharma,R.C.(2002), Modern Science Teaching, Dhanpat Rai Publishing Company(P) Ltd,New Delhi.
3. Yadav,M.S.(2003).Teaching of science teaching ,Anmol Publications, New Delhi.
4. Pandey,(2003).Major Issues in Science teaching, Sumit Publications, New Delhi.
5. Ameeta.P.(2005), Methods of Teaching Biological Science,New Delhi.
6. Venugopal.G and Nithyasri.N,(2005),Teaching of Biology,RamPublishers,Chennai.
7. Mujibul Hasan Siddiqui,(2007),Teaching of science, APH Publishing Corporation,New Delhi.

Supplementary Reading

1. Deepak Dayal,Richa Bhatt and Biswajit Ray,(2007), Modern Methods of Teaching Biology, APH Publishing Corporation, New Delhi.
2. Aggarwal.D.D.(2008).Modern Method of teaching Biology, Karanpaper backs, New Delhi.
3. Rajammal.K.(2009),Methods of Teaching Biological Science,Santha Publication.
4. Krishanamacharyulu.V.(2011),ScienceEducation,Neelkamal Publications pvt.Ltd, Hydrabad.

Course Outcomes

The student teacher should be able to

CO1: acquire the basic knowledge about the aims and objectives of teaching Botany at higher secondary level.
CO2: understand the values , curriculum construction and psychological basic of Botany teaching
CO3: apply the scientific knowledge to identify the suitability of various teaching methods.
CO4: develop skills in effective communication in Botany
CO5: develop interest in knowing more about the dynamic methods of teaching and learning Botany

Outcome Mapping

CO/ PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PS O1	PS O2	PS O3	PS O4	PS O5
CO1	2										2				
CO2										3				2	
CO3			3											2	
CO4					3										3
CO5			3											3	
CO6			2									2			

Year-I (2019-2020)   19BEDO118: Pedagogy of Computer Science –[Part-1]   Credits : 4

Hours   : 4

Learning Objectives (LO): The student teacher
- acquires Knowledge of the aims and objectives of computer science
- understands the nature and scope of computer science, the principles of curriculum construction and organization of subject matter, psychology of learning computer science
- understands the special qualities of a good computer science teacher, acquire those qualities and to evaluate himself or herself
- applies the knowledge in interaction of analysis in actual class room situation and teaching strategies
- develops skill in effective communication
- develops interest in knowing dynamic methods of teaching computer science.
- developsscientific attitude towards the teaching and learning.

Unit-1:
    Computer science Subject Matter Specified in Standard XI to XII in Computer science Syllabus ByTamilnadu Government from time to time respectively.

Unit-2: Nature And Scope
    Nature of Computer science – History of Computer science – Contribution of Indian Scientists Computer science, Scope of Computer science.

Unit-3: Aims And Values Of Teaching Computer Science
    Important Aims Of Teaching Computer science at Higher Secondary Level –Values Of Computer science-Intellectual, Practical, Disciplinary, Moral, Cultural, social And Aesthetic

Unit-4: Objectives Of Teaching Computer Science
A. General and Specific Objectives of Teaching Computer science
B. Bloom's Taxonomy of Educational Objectives (Cognitive, Affective and Psychomotor Domains)
C. Objectives of Teaching Computer science at Different Levels-Primary, Secondary, Higher Secondary.

Unit-5: Curriculum
    Learning theory foundation for instructional design- Task analysis- Content analysis-Recent Trends in Curriculum Development –Student –Subject and Environment Oriented Approaches-Curriculum Development and Improvement Practices in India.

Unit-6: Psychological Basis Of Teaching Computer Science
    Psychology Of Learning Computer science – Gagne's Types of Learning, The Ideas of Piaget and Psychological Aspects- Models of Teaching – Significance Of Models –

Components. Models Developed by Bruner, Ausubel and Suchman– Advantages and Disadvantages- Dewey's Contribution-Dalton Plan

Unit-7: Computer Science Text Book

Text Book – Characteristics – Appropriate Use of It – Uses of Text Book – Importance of Text Book – Difference between work books and text books.

Unit-8: Classroom Climate

Class Room Climate-Authoritarian – Laize Faire and Democratic Climates- Borich three types of classroom climate competitive, cooperative and individualistic types – Components of classroom management, 1.Management of the Physical Environment 2. Management of learning 3. Management of classroom rules 4. Management of the Discipline- Strategies of classroom management .

Unit-9: Effective Communication

Principles of communication-Modes of communication- classroom communication-Communication And Interaction–Teaching Strategies-Guided Discovery, Exposition, Discovery Learning, Investigation- Think Aloud.

Unit-10: Dynamic Methods Of Teaching

Dynamic Methods Of Teaching – Seminar, Symposium, Discussion, Panel Discussions, Workshops–Debates (Formal)- Debate (Informal) by Students – Merits And Demerits. Group Dynamics Techniques- Buzz Sessions, Group Discussions.

For Fast Track Learners

Create an e-content for Teaching of Computer Science-Prosperous usage of Social Media –Establishing Video-conference for Distance Education-Crate Glossary for new words related to Computer Science.

Practical Works

- Organisation and Participation of Class Room Seminars by the student teachers.
- Practising FIAS, Coding, Analysing and preparing report on the effects of analysis in the classroom
- Observing Class Room Climate during teaching practice programme and preparing a report.
- ArrangingGroup Discussions for identifying and removing the problems in teaching and learning process.
- AnalysingText Books of the class allotted during teaching practice

Text Books

1. Rao, P.V.S.,1981 Computer Programming, TMH, Delhi.
2. Roger Humt Hon Shelley,1975 Computers and Common Sense, Prentic Hall (India) Delhi.
3. Shied, Introduction to Computer Science, SCHAVM.
4. StanelyPogrow, Education in the Compute Age, Sage Publication, Delhi, 1993.

Supplementary Reading

1. Steeven M. Rass, Basic Programmking for Education, Pentic Hall, New York, 1990.
2. Jared Keengve, Grace Onchwari,James.N.Oigara,(2014) , Promoting Active learning through Flipped Classroom model, US of America.

Course Outcome

The student teacher should be able to

CO1: acquire the basic knowledge about the aims and objectives of teaching Computer Science at higher secondary level.
CO2: understand the values , curriculum construction and psychological basis of Computer Science teaching
CO3: apply the scientific knowledge to identify the suitability of various teaching methods.
CO4: develop skills in effective communication in Computer Science
CO5: develop interest in knowing more about the dynamic methods of teaching and learning Computer Science

Outcome Mapping

CO/ PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PS O1	PS O2	PS O3	PS O4	PS O5
CO1	2										2				
CO2								3							2
CO3			3											2	
CO4					2										
CO5							3							2	2

Learning Objectives (LO):   The student teacher
- acquires the knowledge of "history of history" and its theories.
- acquires the knowledge of the concepts, terms and current trends in history education.
- understands the authenticity of history and historiography.
- understands the philosophical and sociological basis of teaching history.
- understands the curricular approaches, curriculum change and innovative methods of teaching history
- applies the knowledge of history in actual life situation.
- develops skill by using of various types of teaching aids

Unit-1: Content
Subject matter specified in the history syllabus for standard XI – XII prescribed by the Tamilnadu Government from time to time.

Unit-2: Nature and development of history
The meaning and scope of history – Different conceptions of history – Development of history as a field of study – Indian historians and their contributions to history – Implications of various conceptions of history to teachers – Is history an art or science.

Unit-3: Philosophical basis of history
1. History as an imaginative reconstruction of the past.
   History as a branch of social science – correlated with literature, geography, political and economics.
2. Making of history – How history is written – Collection of sources – Documents – Authenticity and Historiography.
3. Approaches to History – Individual oriented – Society oriented, cultural oriented.
Sociological basis of history – Education reports on history education (various commissions report)

Unit-4: History – Its features and dimensions
Dimensions of history – Continuity development – Time and place – Geographical foundations of history – Chronological divisions of history.

Unit-5: Goals of Teaching history
The need and importance of teaching history – Aims and objectives – General and specific – Values – Practical, intellectual, social, moral and cultural.

Unit-6: Taxonomy of educational objectives
Instructional objectives and specifications of teaching history – Bloom's taxonomy of educational objectives – Meaning and limitations.

Unit-7: Recent trends in curriculum:

1. Curriculum development in history
2. Curriculum construction (Selection, graduation and organization) – Content, principles of selection: Individual, social and national needs.
3. The claims of local history, National history and world history.
4. Chronology in history – Sequence in history, Location, Distance – Duration of historical events in the perspective of time.
5. Theories influencing selections of materials – Doctrine of natural taste and interest – Cultural epoch theory.
6. The development of history curriculum in Tamilnadu – the principles, problems and prospects – Critical analysis of existing Higher Secondary syllabus.

Unit-8: History text book

Importance of text book – materials – uses of textbooks in history – criteria for a good history text book.

Unit-9: Effective communication:

Meaning and forms of communication – communication cycle – Types of communication – Effective classroom communication – Flander's system of Interaction analysis.

Unit-10: Dynamic methods for teaching and learning:

Instructional strategies for teaching history – Problem solving method – Source method - Panel discussion- Seminar-Symposium – Workshop – Supervised study – Brain storming and Team Teaching.

For Fast Track Learners

Social Media - Meaning - Nature - Application of Social Media in Teaching history - Advantages and Disadvantages of Social Media - Open Educational Resources (OER) - Application of OER in Teachinghistory.

Practical Works

- Critically evaluate the history textbook for standard XI, prescribed by the Tamilnadu Government.
- A project report about to visit any one of the place of historical importance.
- Write any three Indian historians and their contribution to the nation.
- Collection of antique materials.
- Prepare a chart showing different states and its capitals in India.

Text Books

1. Busrston.W.H. Principles of history teaching, Methuen & Co. Ltd.,
2. London, 1963.
3. Chaudhary.K.P The Effective Teaching of History, N.C.E.R.T., New
4. Delhi.
5. Kochhar,S.K. Teaching of History, Sterling publishers private Limited,
6. New Delhi, 2005.
7. Majumdar.C. Historiography in Modern India, Sterling publishers
8. private Limited,Bombay, 1979.
9. Sheik Ali.B History its theory and method, the Macmillan company of
10. India Limited, Madras 1978.
11. Terry Haydn et.al Learning to teach history in the secondary school,

Supplementary Reading

1. Methuen and Co-limited London, 2003.
2. Biranchi Narayan Dash Teaching of History, Neel Kamal Publications pvt. Ltd. New Delhi, 2006.
3. SinghY.K. Teaching of History: Modern methds, APH publishing corporation, New Delhi, 2004.
4. Vajreswari.R A Handbook for Teachers, Allied Publishers, Madras 1973.

Course Outcomes

The student teacher should be able to

CO1: explain the subject matter specified in the history syllabus for standard XI-XII of the state board
CO2: analyse the different concepts of history
CO3: correlate history with literature, geography, political science and economic
CO4: Communicate effectively
CO5: analyse theHistory text book

Outcome Mapping

CO/ PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PS O1	PS O2	PS O3	PS O4	PS O5
CO1	1										1				
CO2		2												2	
CO3			2											2	
CO4					2										2
CO5				2							1				

Year-I (2019-2020)   19BEDO120: Pedagogy of Economics –[Part-1]   Credits : 4

Hours : 4

Learning Objectives (LO): The student teacher
- acquires the knowledge of methods of teaching economics
- understands the principles, types, procedures and planning of teaching economics at the higher secondary level.
- applies the method of teaching to various aspects of economics
- develops the skill of
  a) Teaching economics, organizing economic experiences
  b) Testing through various techniques
  c) Using various graphic, other types of teaching aids for the class room
  d) Develops favourable attitude towards the changes in the teaching of economics.

Unit –1: Nature and Scope of Economics
Meaning – Scope and Definition of Economics – Economics in Education – Fields of Economics – Agriculture, Industry, Marketing, Banking, Public Finance and Foreign trades.

Unit –2: Modern Trends in Economics Education
Economics – Trends in curriculum development of Tamilnadu Higher Secondary stages – Importance of Planning of teaching – context of planning of teaching.

Unit –3: Aims and Values of teaching Economics
Aims of teaching Economics – classification of aims - At different stages inculcating values of teaching Economics, Methods of inculcating values through the study of Economics – classification of values.

Unit –4: Constructive Approaches of Teaching Economics
Introduction – Objectives – Taxonomical approach – Bloom's Taxonomy – Classification of instructional objectives – Instructional and Specific objectives – construction in teaching economics.

Unit –5: Curriculum in Economics of Teaching
Meaning – Importance – Blue print - Higher Secondary and CBSE syllabus – curriculum organization – Suggestions for framing good curriculum – features of economics curriculum .

Unit –6: Curriculum in Teaching Materials different Boards
XI and XII Economics syllabus prescribed by Government of Tamilnadu from time to time with reference books materials – Comparison of CBSE and State board syllabus.

Unit –7: Issues in Economics teaching

Contemporary issues and economics issues related to the teaching of economics - Crimes – Security scams, Bank cheating, Cyber rule violation – Types of Technical aspects of Cyber crime- Financial corruption in different levels – Mixed Economy – Corruption in India – causes – effects – fields and remedies.

Unit –8: Legislation and Policies

Legislation – Privatization –Liberalization - Globalization – Disinvestment- Goods and Service Tax(GST) - Tele shopping – Merits and Demerits – Internal and External market.

Unit –9: Development of Teaching skill

Micro teaching – Meaning – Definition – concepts – Skill development teaching – Significance of teacher training.

Unit –10: Methods of Teaching Economics

Lecturer method - Descriptive method – Objective based method – Problem Solving method – Project method – Inductive and Deductive method – Case study method – Dynamic method.

For Fast Track Learners

Taxation VAT-GST- Social responsibilities of Taxation –Tax ethics

Practical Works
- Prepare a classified schemata of fields of Economics.
- List own the values of teaching Economics.
- Prepare a blue – print of the economics text book at the higher secondary stage.
- Design the taxonomical structure of teaching economics.
- Arrange the Instructional objectives of any two lessons in Economics.

Text Books
1. J.C.Aggarwal, (2011), Teaching of Economics (A practical approach), 2nd Edition vitas publishing house.
2. Amita Yadav, (1995), teaching of economics first Edition, Anmol publication pct ltd, New Delhi.
3. M.H. Siddiqui, (2008),*"Teaching of Economics"* APH Publications, New Delhi.
4. Rudramamba et al, (2010), Educational methods of teaching economics, discovery publishing house, New Delhi.
5. Tonne, Popham and freeman, (1995), methods of teaching business subjects, Mcgraw Hill.
6. Kochar, S.K., The teaching of social studies sterling publishers pvt. Ltd., New Delhi.

Supplementary Reading
1. Ebel and L.Robert. (1965), Measuring Educational Achievement, prentice hall international. Inc, USA.
2. Binning, A.C. and D.A. Binning, Teaching the Social studies in Secondary School, Mcgraw hill, New York.
3. Keith Lumsden, (1967), New Developments in the teaching of economics, prentice hall the Englewood, New Jersey.

Course Outcome

The student teacher should be able to

CO1: explain the modern trends in economics education
CO2: classify the schemata of the field of economics
CO3: list down the values of teaching economics

CO4: prepare a blue print for the economics subject
CO5: analyse the issues related to economics

Outcome Mapping

CO/ PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PS O1	PS O2	PS O3	PS O4	PS O5
CO1	2										2				
CO2			2								2				
CO3								2						2	
CO4						2								2	
CO5								2							2

Year-I (2019-2020)   19BEDO121: Pedagogy of Commerce –[Part-1] Credits : 4

Hours   : 4

Learning Objectives (LO): : The Student teacher
- acquires knowledge of the principles of content and conceptual analysis.
- understands the various aspects of content analysis.
- applies the knowledge in analyzing the commerce and accountancy content in pedagogical terms.
- develops skill in construction and preparation of lesson plans, question papers and teaching aids.
- develops interest in analyzing the various commerce course contents in pedagogical terms.
- develops a desirable positive attitude towards teaching commerce.

Unit -1: Nature of Scope

Commerce - Introduction – nature, meaning and scope –commerce education-meaning and importance - commerce and Economics-their mutual relationships.

Unit -2: Trends in Commerce Education

Modern trends in commerce education- major divisions of commerce-trade, Transport, Warehousing, Banking, Insurance, Advertising, Accounting and Auditing.

Unit- 3: Aims and Objectives

Aims and objectives of teaching commerce - values of teaching commerce-theorietical, practical, social, cultural, historical, economical and vocational.

Unit -4: Taxonomical Approach

Bloom's Taxonomy-approach to teaching of commerce - instructional objectives - specifications - learning experience - Objective based instruction (OBI) - Principle and approach.

Unit -5: Commerce Curriculum

Meaning of Curriculum –importance of curriculum - principles involved in curriculum construction- higher secondary commerce and accountancy syllabi- academic and vocational stream of commerce- Tamil Nadu higher secondary level-suggestion for the improvement of curriculum.

Unit -6: Curriculum and Teaching Materials-Different Levels

Selection and gradation subject material for commerce curriculum at schools and college levels- comparison of commerce and accountancy –curriculum of state and central boards of education -academic and vocational streams.

Unit -7: Issues in Commerce Teaching

Contemporary commercial issues and economic issues related to the teaching of commerce and accountancy – WTO- economic crimes- security scam- FERA and FEMA. Commerce and cyber rules- violation-GST and its impact upon commerce.

Unit -8: Legislation and Policies

Liberalization – Privatization – Globalization – dis investment- green- consumer. population – environment issues – e- commerce, teleshopping – issues and prospects and consumer protection movements and acts – adulteration acts.

Unit -9: Development of Teaching Skills

Micro teaching- definition- concept- meaning- micro teaching cycle-different skills in teaching commerce- significance -uses in teacher training.

Unit -10: Methods of Teaching

Various methods of teaching commerce- lecturer method – descriptive method – objective based method- demonstration method- problem method- project method- inductive method- deductive method- case study- student's motivated techniques- surveys and market studies.

For Fast Track Learners

Technology in Teaching of Commerce-Blended learning - Hybrid learning-IMPACT

Practical Works

Prepare advertisement for Commerce
- Prepare a case study of an organization
- Contact market survey
- Visit to various insurance company
- Prepare share market colander for three months

Text Books

1. Ebel. Robert, L. Measuring Educational Achievement, Prentice Hall International, Inc. USA, 1965.
2. Kochhar, S.K., Methods and Techniques of teaching, Sterling Publishers, New Delhi, 1992.
3. Nagarajan, K.L., Principles of commerce and General Knowledge, S.Chand& Company Ltd, New Delhi, India, 1977.
4. OsualaEsogwa, Business Education Principles and Practices, Anu Books, Meerut, India, 1987.
5. Dececee John, P. and et al., The psychology of Learning and Instruction, prentice Hall of India, New Delhi.

Supplementary Reading

1. PiaNazareth, M., Education – Goals, Aims and objectives, Vikas Publishing House Pvt., Ltd., 1984.
2. Tonne, Pophan and Freeman, Methods of Teaching Businees Subjects, McGraw Hill 1965.
3. Tarachand, Principles of Teaching, Anmol Publishing, New Delhi, 1990.
4. Leu, M. Carey, Measuring and Evaluating School Learning, Allyn and Bacon Inc. USA, 1988.

Course Outcomes

The student teacher should be able to

CO1: explain the modern trends in commerce education
CO2: make use of Blooms taxonomy in the teaching of commerce
CO3: select the subject material for commerce curriculum at different levels
CO4: analyze the issues relating to commerce
CO5: distinguish between liberalization, privatization and globalization

Outcome Mapping

CO/ PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PS O1	PS O2	PS O3	PS O4	PS O5
CO1			3								3				
CO2	3													3	
CO3											3				
CO4										3			3		
CO5									3						3

BEDO131: PEDAGOGY OF TAMIL-[PART-1]

Total Marks: 100   **Credits :4**
Internal Assessment: 25   **Contact Hours: 4**
External Assessment: 75

நோக்கங்கள்:
1. தமிழ்மொழியின் பண்புகளையும், இலக்கியவகைகளையும் பற்றிமாணவர்கள் அறிந்துகொள்ளுதல்.
2. மொழித்திறன்கள்,கலைச் சொல்லாக்கம் பற்றிமாணவர்கள் புரிந்துகொள்ளுதல்.
3. கற்றஅளவினைகற்பித்தல் பணிக்குபயன்படுத்தும் திறனைமாணவர்கள் வளர்த்துக் கொள்ளுதல்.
4. தமிழ்மொழி,பாடம் மற்றும் கற்பித்தலின் மீதுமாணவர்கள் விருப்பார்வம் வளர்த்தல்.

அலகு-1
மொழியின் பண்புகள் - மொழியின் தோற்றக் கொள்கை—மொழியின் வளர்ச்சி—தமிழ் மொழியின் கிளைமொழிகள் - பேச்சுமொழியும்,எழுத்துமொழியும் தமிழ் மொழியின் தனித்தன்மைகள்.

அலகு-2
எழுத்துப் பயிற்சி—கையெழுத்தும்,எழுத்துப் பிழை இன்மையும் - எழுதுவதற்குப் பயிற்சியளித்தல் - எழுத்துப் பயிற்சிகள் - எழுதுகருவிகளைபிடிக்கும் முறைஎழுதுங்கால் அமரும் விதம் - எழுத்துப் பிழைகள் - காரணங்கள் - குறைதீர் பயிற்சிகளும் - நடவடிக்கைகளும் - நல்லகையெழுத்தின் நல்லியல்புகள் தெளிவு,அளவு,அழகு, இடைவெளி— சுருக்கிஎழுதுதல்,விரித்துஎழுதுதல்,சொல்வதுஎழுதுதல்.

அலகு-3
நோக்கஅடிப்படைக் கற்பித்தல் - தமிழ்கற்பித்தலில் மேலாண்மை—பாடத்திட்டம் - அலகுத்திட்டம் - பருவத்திட்டம் - ஆண்டுத் திட்டம்.

அலகு-4
தமிழில் கலைச்சொல்லாக்கம் - பல்வேறுஅறிஞர்களின் கருத்துக்கள் - இதுவரையிலானமுயற்சிகள் - அறிவியல் தொழில்நுட்பகலைச்சொற்கள் உருவாக்கம் - கொள்கைகள் - கலைச்சொற்களின் பண்புகள் - எளிமை,வலிமை,துல்லியம். மொழிக்கொள்கைகள் - மொழிமரபுமாறாமல் கலைச்சொல் உருவாக்கம் பழஞ்சொல் தேர்வு—கலைச் சொல்லாக்கச் சிக்கல்கள்.

அலகு-5
மொழியின் சமூகவியல் கூறுகள் - சமூகவியல் பின்னணியில் மொழிமற்றும் பண்பாட்டைக் கற்றல் - மொழிவளர்ச்சிதளர்ச்சியில் சூழ்நிலை, இயற்கை,பண்பாட்டின் பங்கு—பண்பாட்டில் பின் தங்கியவரைஈடுசெய்யும் கல்விமுறை—தமிழ்கல்வியும் - மதிப்புக் கல்வியும் - மொழியும் பொருளாதாரமும்.

அலகு-6
இலக்கிய வகைகள் - மரபுக் கவிதை—தமிழ் அறிஞர்கள் மற்றும் வெளிநாட்டினரின் விளக்கம் - கற்பனைஉணர்ச்சி—வடிவம் - பாடுபொருள் - கவிதையில் பெறுமிடம் - உள்ளுறை—உவமை—அணி, இறைச்சிபோன்றவற்றின் சிறப்புக்கள்.

அலகு-7
நாடகம் - தோற்றமும் வளர்ச்சியும் - சங்க இலக்கியம் ஓர் கூத்துநாடகம் - சிலப்பதிகாரத்தில் காணப்படும் நாடகச் செய்திகள் - நாடகத்தின் அமைப்பு—நாடகவகைப்பாடு - இக்காலநாடகங்கள் - எழுத்துநாடகங்கள் - வானொலிநாடகங்கள் - தொலைக்காட்சிநாடகங்கள் இவைகளின் மொழி,நடை,அமைப்பு—செய்யுளைநாடகமாக்கலின் கற்பித்தல்-நாடகஉத்திகள்.

அலகு-8

    புதுக்கவிதை - இலக்கணம் - அமைப்பு–தோற்றம் - வளர்ச்சி - இன்றையநிலை. பாரதிமுதல் தற்காலகவிஞர்கள் வரைபுதுக்கவிதையின் பாடுபொருள்,நோக்கு,போக்குகுறித்தசெய்திகள்.

அலகு-9

    நாட்டுப்புற இலக்கியம் - தாலாட்டுப் பாடல்கள் - தொழிற் பாடல்கள் - காதல் பாடல்கள் - கதைப் பாடல்கள் - தெம்மாங்குப் பாடல்கள் - வழிபாட்டுப் பாடல்கள் - ஒப்பாரிப் பாடல்கள் - சிறுதெய்வக் கதைப் பாடல்கள்.

அலகு-10

    பயண இலக்கியமும் ஆற்றுப்படை நூல்களும் - ஓர் ஒப்பீடு–பயண இலக்கியம் - விளக்கம் - பயன்கள் - குழந்தை இலக்கியம் - விளக்கம் - வளர்ச்சி - தன் வரலாற்று நூல்கள் - ஒருயோகியின் சுயசரிதம்,சத்தியசோதனை,அக்கினிச் சிறகுகள் - பள்ளி இதழ் தொடங்குதலும்,நடத்தலும்.

மீ திறீ ழீ தைகீ ° கானதமீ கீ பீ°°° றைகீ

தமிழ்ச் செய்யுட்பகுதிகளை இசையுடனும்,ராகத்துடனும் பாடிடபயிற்சியளித்தல். தன்னம்பிக்கைமற்றும் மென்திறன் மேம்பாட்டைமையமிட்டபேச்சுகளை'யூடியூப்'வாயிலாகக் கேட்டுஉள்வாங்கிவளர்ப்பதைஊக்குவித்தல்.

செய்முறைப் பயிற்சி:
1. முன்னறிவிப்பில்லாசொற்பொழிவுகள்
2. செய்யுள் பகுதியைநாடகமாகமாற்றுதல்.

கற்றல் வெளிப்பாடுகள்

    இப்பாடத்தைபயிலுவதன் மூலம் மாணவஆசிரியருக்கு

* தமிழ் மொழி, இலக்கியம் மீதானஅறிவைஅதிகப்படுத்திககொள்ளமுடிகின்றது.
* மொழித் திறன்கள் மற்றும் கலைச் சொல்லாக்கஉருவாக்கங்களைப் புரிந்துக்கொள்ளமுடிகிறது.
* பல்வேறுவகையானபயிற்றுமுறைகளின் மீதானஆர்வம் அதிகரிக்கின்றது.
* தமிழ் மொழிகற்பித்தலின் மீதுநேர் மறையானஅணுகுமுறையைஉருவாக்கிக் கொள்ளமுடிகின்றது.

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4	PSO5
CO1		3									3				
CO2			2										3		
CO3				3				3							2
CO4	3					2								2	
CO5				2						3					3

பார்வை நூல்கள்:
1. சுப்புரெட்டியார். இரா. 2001,தமிழ் பயிற்றும் முறை,மணிவாசகர்,பதிப்பகம்,புதுத்தெரு,சிதம்பரம்.
2. வரதராசனார் மு.வ. 1995,மொழிவரலாற்றுகழகவெளியீடு,சென்னை.
3. கலைச்செல்வி, வெ. 2008,கல்வியியல் சிறப்புத் தமிழ்,சஞ்சீவிவெளியீடு,ஈரோடு.
4. கணபதி, வி. 2005,நற்றமிழ் கற்பிக்கும் முறைகள் பகுதி-ஐஐ சாந்தாபப்ளிஷர்ஸ்,சென்னை.
5. அழகப்பன்,அரு. 1987,நாடகத்தின் தோற்றமும் வளர்ச்சியும்,அண்ணாமலைப் பல்கலைக்கழகம்,சிதம்பரம்-2.

Learning Objectives (LO): The student teacher
- acquires the knowledge of the concepts, terms and procedures in the pedagogy of English
- understands the concepts, terms and procedure in the innovations, trends, and approaches of teaching English
- uses the knowledge in actual classroom situations
- develops interest in various activities pertaining to teaching and learning of English
- develops interest in knowing recent developments in the innovations, trends, and approaches of teaching English
- develops positive attitude towards teaching and learning of English
- appreciates the contribution of English language to the process of teaching and learning

Unit-1 : Teaching of Content

Subject matter of VI to X Standard English textbooks prescribed by Tamilnadu government from time to time – Advanced Grammar – types of sentences – basic sentence patterns – active and passive voice – direct and indirect speech – question forms – tag questions.

Unit-2 : Aims of Teaching English

Aims of teaching English – at Higher Secondary Level – Fundamental Aims –Four Basic Skills.

Unit-3 : Objectives of Teaching English

Four Fold Objectives – Bloom's Taxonomy – Objective Based Instruction at higher secondary level – Instructional objectives and specific learning outcomes.

Unit-4 : Theories of Language Learning

Language learning - theories - difference   between learning L1- and L2 - influence of mother tongue – barriers for learning a foreign language.

Unit-5 : Principles of Language Teaching

Principles - speech before writing – habit formation - proper order and proportion – passive and active vocabulary.

Unit-6 : Factors Affecting Language Learning

Psychological factors affecting language learning – attitude – desires – motives – intelligence – emotions – readiness – rewards and punishments – Sociological –factors affecting language learning – home environment – school environment –utility of language.

Unit-7: Policies and Problems in Language Education

Three language formula –implementation – controversies – problems of teaching English in India.

Unit-8 : Methods of Teaching English

Translation Method – Direct Method – Substitution Method – Bilingual Method - meaning – principles – merits and demerits.

Unit-9 : Approaches of Teaching English

Structural   approach - Situational approach - Communicative   approach - Meaning – Principles – Merits and Demerits.

Unit-10 : Types of Courses

Need for designing of courses – target group – English for global purpose –English for specific purpose – EAP – EST – EOP – Remedial English Course-course implementation benefits.

For Fast Track Learners

Teaching Literature – Aims – Areas – Simile – Metaphor – Hyperbole – Litote – Irony – Onomatopoea (echoism) – Paradox – Euphemism – Epanodos – Epistrophy – Alliteration – Personification – Difficulties in teaching literature – Procedure – through Prose – Poetry – Drama.

Practical Work
- Prepare a chart with prefixes and suffixes.
- Highlight different ways of word formation.
- Enlist different types of errors committed by Indian students.
- Write a critical analysis of *a* language textbook.
- Narrate of a story with a good social message.

Text Books
1) Ambedkar, V (2011) Teaching of English in Indian Context, Orathanadu: Annaveera Publishers
2) Anne, V.K., 2001. Methods of Teaching English. Hyderabad: New Era Publications.
3) Baruah, T.C., 2006. The English Teachers Handbook. New Delhi: Sterling Publishers.
4) Close, R.A., 1999, English as a Foreign Language. London: Longman.
5) Dash, B.N., 2007. Teaching of English .. New Delhi: Dominant Publishers
6) Halliday, M .A.K., 1998. Language as a Social Semiotic. Lc no on: Arnold Publications.
7) Jack, Richards, 2012. Approaches and Methods in Language Tear-nig. London: Cambridge
8) Jindal, D.V., 2008. An Introduction to Linguistics. New Delhi: Pre   ;ce Hall.
9) Krishna Babu, S., et.al. 2009. Reading Disabilities. New Delhi: Soi. 'U.
10) Kohli,   A.L(2006) Techniques of Teaching English.   New Delhi:Uhanapat Rai Publications.
11) Kishnaswamy, N., 2005. Teaching of English Grammar. Chennai: T.R.Publications.

Supplementary Reading

1) Mowla, Shaikh, 2006. Techniques of Teaching English.Hyderabad: Neelkamal.
2) Pahuja, N.P., 2009. Teaching of English. New Delhi: Anmol Publications.
3) Swan, Michael, 2002. Practical English Usage. Oxford: OUP.
4) Venkateswaran, S., 2011. Principle of Teaching English. New Delhi: Vikas Publishing House.
5) Vallabhi, J.E., 2012. Teaching of English II: Principles and Practices. Hyderabad: Neekamal.

Course Outcomes

The student teacher should be able to

CO1: acquire the knowledge of the concepts, terms and procedures in pedagogy of English.
CO2: understand the theories and principles of language learning
CO3: comprehend the factors affecting language learning
CO4: equip with the latest methods and approaches of teaching English
CO5: design, implement and evaluate unit plans and lesson plans.

Outcome Mapping

CO/ PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PS O1	PS O2	PS O3	PS O4	PS O5
CO1		3												3	
CO2			3				2							3	
CO3		3												3	3
CO4				3						2				3	
CO5						3			3					3	

Learning Objectives (LO): The student teachers
- acquires knowledge of the aims and objectives of mathematics
- understands the nature and scope of mathematics, the principles of curriculum construction and organization of subject matter, the technological method of teaching mathematics
- applies knowledge in the technological methods of teaching
- develops the skills in solving mathematics problem
- develops interest in planning their lessons to learn mathematics
- develops a positive attitude towards mathematics teaching

Unit- 1:
Mathematics Subject matter Specified in Standard VI to IX of Mathematics Syllabus prescribed by Tamilnadu Government from time to time respectively.

Unit -2: Nature and Scope
Nature of Mathematics – History of Mathematics – Contribution of Indian Mathematician, Scope of Mathematics. Correlation of Mathematics with different Subjects .

Unit -3: Aims and Values of Teaching Mathematics
Important Aims of Teaching Mathematics at Secondary Level-Values of Mathematics- Intellectual, Practical, Disciplinary, Moral, Cultural, Social and Aesthetic

Unit -4: Objectives of Teaching Mathematics
General and Specific Objectives of Teaching Mathematics-Bloom's Taxonomy of Instructional Objectives (Cognitive, Affective and Psychomotor Domains)

Unit -5: Curriculum
Principles of Selection of Content Materials for Mathematics Curriculum in Schools, Arrangement of curriculum- Revision of the Curriculum- Problems-Different types of Problems-Recommendations of commissions-Evaluation of syllabus.

Unit -6: Problem – Solving Method and Mathematical Attitude
Problem – solving method– characteristics of a good problem in mathematics-steps-Merits-De Merits-Mathematical Attitude.

Unit -7: Approaches of Learning Mathematics
Cooperative Learning and Collaborating Learning-Self Access Learning-Investigatory Approach, Concept Mapping

Unit -8: Teaching Methods
Lecture Method, Lecture cum Demonstration Method, Problem Solving Method, Laboratory, Project Method Heuristic Method, Inductive and Deductive Methods Analytic and Synthetic Method, Project Method, ALM Method

Unit -9: Technological Method Of Teaching-Individualisation Of Education
Individualised Instruction- Individualisation of Education- Individualised Learning Techniques –- Programmed Learning – Principles-Linear Programme-Branching Programme – Computer Assisted Instruction-Characteristics-Personalised System of Instruction

Unit -10: Developing Teaching Skills
Microteaching and Its Scope-Microteaching Cycle –Skill of Introduction, Skill of Explaining, Skill of Stimulus Variation, Skill of Reinforcement, Skill of Questioning, Skill of

Using Blackboard, Skill of Demonstration, Skill of Achieving Closure, Skill of Probing Questions.

For Fast Track Learners

Technology based tools-Mobile learning- Preparation of Video lessons- Digital Classroom- Innovative Digital teaching

Practical Works

- Preparation of scrap book on the development of mathematics.
- Preparation of essays on the contribution of Mathematicians
- Evaluating syllabus of any one of the standard at secondary level and preparing report.
- Presentation of Computer Assisted Instruction on any topic.
- Preparation of Linear Programme& Branching Programme frames on the topics in Mathematics

Text Books

1. Ball, W.N.R., (1893)A Short History of Mathematics, Mac.Milan, New York
2. Baur, George, R.R. Geeorge, *Linda Olsen(*1976)*Helping Children Learning Mathematics,* Cunnings Publishing Company, Inc.
3. Bell, E.T.,(1952) *Mathematics*, Queen and Servant of Sciences, McGraw Hill, New York.

Supplementary Reading

1. Sudhir Kumar, (1993), *The Teching of Mathematics, Anmol Publications,* ,New Delhi
2. Sidhu, Kulbra,(1987) *The Teaching of Mathematics*, Sterling Publishers, New Delhi.

Course Outcomes

The student teacher should be able to

CO1: acquire the basic knowledge about the aim and objective of teaching Mathematics at Higher Secondary Level

CO2: understand the various principles of curriculum consideration andtechnological methods of teaching Mathematics

CO3: apply the scientific knowledge to identify the suitable methods of teaching Mathematics

CO4: develop the skills in practicing micro- teaching technique to improve their teaching skills.

CO5: improve the interest to know more about the planning of lesson to teach.

Outcome Mapping

CO/ PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PS O1	PS O2	PS O3	PS O4	PS O5
CO1		3											3		
CO2			3				3						3		
CO3		3											3		3
CO4	3									3				3	
CO5				3				3	2						

Learning Objectives (LO): The Student teacher
- acquires Knowledge of the aims and objectives of teaching Physical science
- understands the nature and scope of Physical science, The principles of curriculum construction and organization of subject matter, and the technological method of teaching Physical science
- applies the knowledge in the technological methods of teaching
- develops the skills in the approaches of learning and teaching of Physical science
- develops interest in planning their lessons in different approaches of learning Physical science
- develops scientific attitude towards various teaching skills and the importance of teaching skills

Unit-1:
Physics and Chemistry subject matter specified in standard VI to IX in Science syllabus by Tamil Nadu Government from time to time respectively.

Unit -2: Nature and Scope
Nature of Physical science – History of Physical science – Contribution of Indian Scientists to Science, Scope of Physical science. Correlation of Physical science with different subjects

Unit -3: Aims and Values of Teaching Physical Science
Important Aims of Teaching Physical science at Secondary Level-Values of Teaching Physical science
.
Unit -4 Objectives of Teaching Physical Science
General and Specific Objectives of Teaching Physical sciences-Bloom's Taxonomy of Instructional Objectives (Cognitive, Affective and Psychomotor Domains)

Unit -5 : Curriculum in Physical Science
Principles of Selection of content materials for Science Curriculum in Schools, Modern Trends In Curriculum Development PSSC, CHEM Study and Chemical Bond Approach-NCERT curriculum.

Unit -6: Scientific Method and Scientific Attitude
Scientific Method-Meaning, procedure and Steps, Scientific Attitude-Meaning, concept and ways of developing scientific attitude.

Unit -7: Approaches of Learning Physical Science
Pedagogical shift from science as fixed body of Knowledge to process of constructing knowledge, Problem Solving, Investigatory Approach, Concept Mapping, Collaborating Learning and Experimental Learning in Physical science.

Unit -8: Teaching Methods
General Methods: Lecture Method, Lecture-cum-demonstration method, Problem solving method, Laboratory method, Project method, Heuristic method, Historical and Biographical method, Project Method, ALM and MLM Method.

Unit -9: Technology based Instruction

Individualised Instruction – concept and principle – Programmed Learning – Linear and Branched Programming – Computer Assisted Instruction- Teaching Module – Characteristics of Personalised System of Instruction.

Unit -10: Developing Teaching Skills

Microteaching Technique – principle and procedure – Microteaching Cycle –Skill of Introduction, Skill of Explaining, Skill of Stimulus Variation, Skill of Reinforcement, Skill of Questioning, Skill of Probing Questioning, Skill of Using Blackboard, and Skill of Achieving closure.

For Fast Track Learners

Technology in Teaching of Physical science-Blended learning - Hybrid learning- IMPACT

Practical Works

- Preparation of scrap book on the development of physical science.
- Preparation of List on the contribution of scientists.
- Evaluating syllabus of any one of the standard at secondary level and preparing report.
- Presentation of Computer Assisted Instruction on any topic.
- Preparation of Linear Programme & Branching Programme frames on the topics in Physical science
- Experiments in Physics and Chemistry subjects at secondary level.

Text Books

1. Boulind, H.E., (1972) The Teaching of Physics in Tropical Secondary School, Oxford University, London.
2. Dale E.D.,(1970) Audio Visual Methods Teching, Dryden Press, New York.of Science in Our School,Chand& Co. P. Ltd., New Delhi.
3. Newbur, N.F.,(1983) Teaching of Physical science in Tropical Secondary Schools, Oxford Universtiy Press, London.
4. Sharma, R.C., (1976) Modern Science Teaching, DhanpetRai& Sons, Delhi.
5. Sharma, R.C., (1976) Modern Science Teaching, DhanpetRai& Sons, Delhi.
6. Saunders, A.N. (1955). Teaching of General Science in Tropical Secondary School, Printed in Great Britain by Butter and Taunen Limited, London
7. Sharma, R.C. (2006). Modern Science Teaching, DhanpatRai Publications, New Delhi.
8. Pandey, (2003).Major Issues in Science Teaching, Sumit Publications, New Delhi.
9. Yadav, M.S. (2003). Teaching of Science, Anmol Publications. New Delhi.
10. Gupta, S.K. (1985). Teaching of Chemistry in Secondary Schools, Sterling Publication (Pvt.) Limited.
11. Heiss, Obourn& Hoffman (1985). Modern Science in Secondary Schools, Sterling Publication (Pvt.) Limited.
12. Edgar Dale, Audio-Visual Methods in Teaching, Revised Edition, Thy Dryden Press,

Supplementary Reading

1. PannerSelvam, A. (1976).Teaching of Chemistry (Tamil), Government of Tamil Nadu.
2. Nair, C.P.S. (1971). Teaching of Science in our Schools, Sulthan Chand & Co. (Pvt.) Limited.
3. Joseph, (1966).The Teaching of Science, Harvard University Press.

4. Newbury N.F., Teaching of Chemistry in Tropical Secondary Schools, Oxford University Press.
5. Thurber, Walter, A., and Collettee, Alfred, T. (1964).Teaching Science in Today's Secondary School, Prentice Hall of India Pvt. Ltd.

Course Outcomes

The student teacher should be able to

CO1: acquire the basic knowledge about the aim and objective of teaching Physical Science at High School Level

CO2: understand the various principles of curriculum consideration andtechnological methods of teaching physical Science

CO3: apply the scientific knowledge to identify the suitable methods of teaching physical science

CO4: develop the skills in practicing micro- teaching technique to improve their teaching skills.

CO5: improve the interest to know more about the planning of lesson to teach.

Outcome Mapping

CO/ PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PS O1	PS O2	PS O3	PS O4	PS O5
CO1		3											3		
CO2			3				2						3		
CO3		3											3		
CO4				3						2			3		
CO5								3					3		

Learning Objectives (LO): The student teacher
1. acquires thorough knowledge of topics in natural science taught in secondary schools and the latest developments.
2. understands the
   * importance of biological science of the modern age and the need for the teaching of biological science in schools.
   * aims and values of teaching biological science
   * objectives of teaching biological science at various levels and especially in the secondary schools.
   * different steps involved in the scientific methods and ways of developing scientific attitude.
   * various approaches and methods of teaching biological science
   * organization of content in biology and principles of developing biological science syllabus.
   * teaching skills for teaching biological science.
3. develops skills in
   * teaching biological science at secondary level
   * preparing, and using the appropriate instructional materials in biological science.
   * preparing biological science curriculum

Unit-1 Biological Science Content
Biological science subject matter of VI, VII, VIII, and IX syllabus prescribed by Tamilnadu Government from time to time.

Unit –2: Nature and Scope of Teaching Biological Science
History of biological science and its nature – Importance of Biological science and its place in the school curriculum – Biological science for environment and health, peace and equity – Impact of biology on modern communities – The significant discoveries and inventions in biology – Great Indian Biologist.

Unit –3: Aims and Values of Teaching Biological Science
Aims of teaching biological science at secondary level –Values of teaching biological science.

Unit –4: Objectives of Teaching Biological Science
Objectives of teaching biological science at secondary level – Objectives of teaching biology with special reference to Bloom's taxonomy – Instructional objectives and specifications of teaching biological science – Objective based instruction.

Unit –5: Biological Science Curriculum
Principles of curriculum construction in biological science –Selection of content and organization of subject matter –BSCS and Nuffield secondary science project –NCERT curriculum.

Unit –6: Scientific Method and Scientific Attitude
Meaning, procedure and steps in scientific method – Elements of scientific method – Meaning and concept of scientific attitude – Ways of developing scientific attitude.

Unit –7: Approaches of Learning Biological Science

Problem solving, investigatory approach, concept mapping, collaborative learning and experimental learning in biological science.

Unit –8: Methods of Teaching Biological Science

Concept of teaching method – Need of variety of teaching method- Characteristics of good teaching method – Selection of a teaching method – Various methods of teaching biological science – Lecture method, Demonstration method, Project method, Heuristic Method, Biographical and Assignment method.

Unit –9: Technology Based Methods

Concept, types and advantages of programmed instruction- Computer Assisted Instruction – Teaching Module – Mass media for learning biological science - MOOCs; SWAYAM.

Unit-10: Developing Teaching Skills

Concept of Teaching Skill –Importance and techniques of developing teaching Skills – Micro teaching technique – Types of teaching skills –set induction, skills of motivation, use of black board, probing questioning, reinforcement, promoting students participation, using examples and closure.

For Fast Track Learners

Scientific concepts and fundamentals- scientific skills-scientific interest and temperament.

Practical Work

1) Prepare an e-document on life and contributions of eminent Biologists.
2) Prepare an e-learning material based on any topic in biological science at secondary school level.
3) Read and reflect on any one secondary school biological science textbook and find out to what extent they satisfy the national and global requirements.
4) Prepare a concept map/mind map on any topic in biological science.
5) Prepare a programmed instruction material for any one of the concept in biological science.
6) Prepare a Power point; for any one of the concept in biological science.

Text Books

1. Ameeta, P.,(2005). Methods of Teaching Biological Science. Hydrerabad: Neelkamal Publications Prt.Ltd.
2. Bhatt, B. D., Sharma S.R., (1996). Methods of Teaching Science. Delhi: Kanishka Publishing House.
3. Bloom, B.S. (Ed.), Engelhart, M.D., Furst, E.J., Hill, W.H., & Krathwohl, D.R., (1956). Taxonomy of Educational Objectives: The Classification of Educational Goals. Handbook 1: Cognitive Domain. New York: David McKay
4. Choudhary, S., (2004). Teaching of Biology. New Delhi: APH Publishing Corporation.
5. Cronbach, L. J. & Snow, R. E., (1977). Aptitude and Instructional Methods. New York: Irvington Publishers.
6. Das, R.C., (1985). Science Teaching in Schools. New Delhi: Sterling Publishers.
7. Dave, R.H., (1970). Psychomotor Levels. In R.J. Armstrong (Ed.), Developing and Writing Educational Objectives (pp. 33-34). Tucson AZ: Educational Innovators Press.

8. Deepak Dayal, Richa Bhatt and Biswajit Ray,(2007). Modern Methods of Teaching Biology. New Delhi: APH Publishing Corporation.
9. Harrow, A.J., (1972). A Taxonomy of the Psychomotor Domain: A Guide for Developing Behavioral Objectives. New York: David McKay.
10. Joyce, B., & Weil, M., (2000). Models of Teaching (6th ed.), Boston: Allyn and Bacon.
11. Krishanamacharyulu,V., (2011). Science Education. Hyderabad: Neelkamal Publications pvt.Ltd,.
12. Lakshmi Gadde, Bhuvaneswara, (2003). Methods of Teaching Life Sciences. New Delhi: Discovery publishers.
13. Malhotra,V., (2007). Encyclopaedia of Modern Methods of Teaching Science. New Delhi: Crescent Publishing Corporation.
14. Mujibul Hasan Siddiqui,(2007). Teaching of Science. New Delhi: APH Publishing Corporation.
15. Narendera Vaidya, (1999). Science Teaching for the 21st century. New Delhi: Deep&Deep Publication.
16. NCERT (1996). Science for Classes IX and X, New Delhi: NCERT Publications.
17. NCERT (2006). National Curriculum Framework for School Education 2005. New Delhi: NCERT Publications.
18. Passi, B. K., (Ed) (1976).Becoming Better Teacher: A Micro Teaching Approach. Ahamadabad: SahithyaMudranalaya Publishers.

Supplementary Reading

1. Rajammal,K.,(2009). Methods of Teaching Biological Science. Chennai: Santha Publication,
2. Rajput, J. S. (ed.) (2002). Experiences in School Education. New Delhi: NCERT Publications.
3. Schmeck, R.R., (1998). Learning Strategies and Learning Styles. New York: Plenum Press.
4. Sharma,R.C.,(2002). Modern Science Teaching. New Delhi: Dhanpat Rai Publishing Company(P) Ltd.
5. Sood, J. K., (1985). Teaching Life Sciences. Delhi: Kohli Publications.
6. Taylor D. J. and others, (2004). Biological Science. London: Cambridge university press.
7. Trowbridge, L. W. & Bybee, R. W., (1996). Teaching Secondary School Science.(6thed.). Englewood Cliffs. NJ: Prentice – Hall Inc.

Course Outcomes

The student teacher should be able to

CO1: acquire the basic knowledge about the aim and objective of teaching Biological Science at High School Level.
CO2: understand the various principles of curriculum consideration and technological methods of teaching Biological Science
CO3: apply the scientific knowledge to identify the suitable methods of teaching Biological Science
CO4: develop the skills in realize micro- teaching technique to improve their teaching skills.
CO5: improve the interest to know more about the planning of lesson to teach.

Outcome Mapping

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4	PSO5
CO1		3												3	
CO2			3			3			2					3	
CO3		3												3	
CO4				3						2				3	3
CO5					3		3							3	

Learning Objectives (LO): The student teacher
- acquires the knowledge of the concepts, terms and procedures in social science of various stages.
- understands the aims, objectives and values of teaching social science.
- understands the curricular, approaches, curriculum change and appropriate methods of teaching social science.
- understands the innovative social science teaching learning strategies in social science.
- applies the knowledge of social science in classroom situations.
- develops interest in knowing the current trends in socio-economic and political spheres.

Unit–1: Content
Subject matter specified in the syllabus of social science for VI to X Std prescribed by the Tamilnadu Government from time to time.

Unit-2: Nature and Scope
Meaning - Nature of social science – Scope – Difference between social science and social studies – Present perceptions of social science – Evolution of social science – Social science in relation to history – Geography – Civics and economics.

Unit–3: Aims, Objectives and Values of Teaching Social science at secondary Level.
Meaning – General and specific aims of teaching social science in the various stages – Objectives – Differences – Values – Cultural – Ethical – Intellectual – Educational – Nationalistic and inter-Nationalistic values.

Unit–4: Instructional Objectives
Instructional objectives and specifications of teaching social science – Bloom's taxonomy of educational objectives – Meaning and importance – Limitations of bloom's taxonomy.

Unit–5: Curriculum
Social science curriculum – Curriculum based on national and state policies – Organizing social science curriculum at the school level –Correlation – Integration – Concentric – Chronological – Periodical and spiral approach – Detailed study of the secondary school social syllabus – Curriculum content graded social science – A critical study of the secondary school social science syllabus.

Unit–6: Scientific Methods – Activity and Playway Devices
Importance of activities in social science – Types of activities – Research – Construction and processes – Creative playway devices - Mock parliament – Mock election.

Unit–7: Scientific Approach
Important features of social science – Continuity – Variety – Unity – Teaching of cultural heritage of India.

Unit–8: Methods of Teaching
Traditional – Lecture - Dramatization – Story felling – Text book – Unit method – Assignment method – Source method – Laboratory – Supervised study – Socialized recitation.

Unit-9: Methods of Teaching

Modern methods – Problem solving – Project method – Individualized instruction – Programmed learning – Computer assisted instruction (CAI) – Internet and its application – Meaning – Working of internet e-learning – World wide web – Teleconferencing – Satellite – EDUSAT- GR code- mooc- SWYAM.

Unit–10: Micro Teaching and Teaching Skills.

Definition of micro-teaching – Micro cycle – Positive aspects of micro-Teaching – skill development – Set induction – Motivation – Introducing a lesson – Explaining – Questioning – Use of blackboard – Reinforcement – Stimulus variation and closure.

For Fast Track Learners

Electronic Learning - Meaning - Nature - Features of E-Learning - Application of E-Content Package in Teaching Social Science - Advantages of E-Content - Designing and Development of E-content - Standards of E-content - Re-usability of E-content - E-content Tools - Graphics, Audio and Video-Creating and Editing for Teaching Social Science.

Practical Works

- A creative write up of Pandya kings and their contribution to the nation.
- Make a report on the important current events after 2000.
- Collect the pictures of important national leaders after independence and arrange it chronologically.
- Prepare a report about the different monsoons of India and it results.
- Critically analyse the important teaching methods and give a report
  about the merits and demerits of the methods.

Text Books

1. Aggarwal,J.C. Teaching of political science, Vikas publishing house Pvt., Ltd., , Ansari Road., New Delhi, 1987.
2. Sharama, S.P., T.P.Lamba, C.R.Saxeno and V.Murthy, Teaching of Civics, Nai Sarak, Publishing House Pvt., Ltd., Delhi 1988.

Supplementary Reading

1. Kochhar.S.K., The teaching of social science, Sterling Publishers Pvt., Limited, New Delhi, 2005.
2. Dash.B.N. &RahakrishnaMurthy,Methods of Teaching Social science, Neelkamal Publications Pvt., Ltd., New Delhi 2012.

Course Outcomes

The student teacher should be able t

CO1: explain the subject matter specified in the social science syllabus from standard VI – X of the state board.

CO2: correlate social science with history, geography, civics and economics

CO3: develop different values by learning social science

CO4: make use of Bloom's taxonomy in the teaching of social science

CO5: organize social science curriculum at the school level

Outcome Mapping

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4	PSO5
CO1		3												3	
CO2			3				2							3	
CO3		3						3						3	
CO4	3													3	
CO5										3				3	

Learning Objectives (LO): The Student Teachers
- acquires knowledge of the aims and objectives of computer science
- understands the nature and scope of computer science, the principles of curriculum construction and organization of subject matter, the technological method of teaching computer science
- applies knowledge in the technological methods of teaching
- develops the skills in the approaches of learning computer science teaching of computer science and to develop the skills in them through classroom teaching
- develops interest in planning their lessons in different approaches of learning computer science
- develops a positive attitude towards various teaching skills and the importance of teaching skills

Unit-:1: Introduction
Computer science Subject matter Specified in Standard VI to IX of Computer science Syllabus prescribed by Tamilnadu Government from time to time respectively.

Unit-2: Nature   And Scope.
Nature of Computer science – History of Computer science – Contribution of Indian in the field of Computer science, Scope of Computer science.

Unit-3: Aims And Values Of Teaching Computer Science
Important Aims of Teaching Computer science at Secondary Level-Values of Computer science- Intellectual, Practical, Disciplinary, Moral, Cultural, Social and Aesthetic

Unit-4: Objectives Of Teaching Computer Science
A .General And Specific Objectives of Teaching Computer science
B. Bloom's Taxonomy of Educational Objectives (Cognitive, Affective and Psychomotor Domains)
C. Objectives of Teaching Computer science at Secondary Level

Unit-5: Curriculum
Principles of Selection of Content Materials for Computer science Curriculum in Schools, Arrangement of curriculum- Revision of the Curriculum- Problems-Different types of Problems-Recommendations of commissions-Evaluation of syllabus.

Unit-6: Problem – Solving*Method**And**Mathematical Attitude**
Problem – solving method– characteristics of a good problem in Computer science-steps-Merits-De Merits.

Unit-7: Approaches Of Learning Computer Science
Cooperative Learning- Contextual Learning- Mastery Learning- Constructivism- Self Access Learning-Active Learning Tasks- Investigatory Approach, Concept Mapping, Collaborating Learning And Experiential Learning

Unit-8: Teaching Methods
Lecture Method, Lecture cum Demonstration Method, Problem Solving Method, Laboratory, Project Method Heuristic Method, Inductive and Deductive Methods Analytic and Synthetic Method, Project Method, ALM, MLM Method.

Unit-9: Technological Method of Teaching-Individualisation Of Education

Individualised Instruction-Individualisation of Education- Individualised Learning Techniques –- Programmed Learning – Principles-Linear Programme-Branching Programme – Computer Assisted Instruction. System Approach in Education-Characteristics-Personalised System of Instruction.

Unit-10: Developing Teaching Skills

Microteaching And Its Scope-Microteaching Cycle –Skill Of Introduction, Skill Of Explaining, Skill Of Stimulus Variation, Skill Of Reinforcement, Skill Of Questioning, Skill Of Using Blackboard, Skill Of Demonstration, Skill Of Achieving Closure, Skill Of Probing Questions.

For Fast Track Learners

LMS- Learning Management System-Establishing usage of LMS with 50 students-Downloading and uploading of content for You tube.

Practical Works

- Preparation of scrap book on the development of Computer science.
- Preparation of essays on the contribution of Indians
- Evaluating syllabus of any one of the standard at secondary level and preparing report.
- Presentation of Computer Assisted Instruction on any topic.
- Preparation of Linear Programme & Branching Programme frames on the topics in Computer science

Text Books

1. Rao, P.V.S., Computer Programming, TMH, Delhi.
2. Roger Humt Hon Shelley, Computers and Common Sense, Prentic Hall (India) Delhi.
3. Shied, Introduction to Computer Science, SCHAVM.

Supplementary Reading

1. StanelyPogrow, Education in the Compute Age, Sage Publication, Delhi, 1993.
2. Steeven M. Rass, Basic Programmking for Education, Pentic Hall, New York, 1990.

Course Outcomes

The student teacher should be able to

CO1: acquire the basic knowledge about the aim and objective of teaching Computer Science at higher secondary level

CO2: understand the various principles of curriculum consideration andtechnological methods of teaching Computer Science

CO3: apply the scientific knowledge to identify the suitable methods of teaching Computer Science

CO4: develop the skills in practicing micro- teaching technique to improve their teaching skills.

CO5: improve the interest to know more about the planning of lesson to teach.

Outcome Mapping

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4	PSO5
CO1		3									3			3	3
CO2							3							3	
CO3		3												3	
CO4				3										3	
CO5								3	3					3	

Learning Objectives (LO): The student teacher
- acquires knowledge of the innovations, trends and approaches of teaching economics
- understands the concepts, terms and procedures in the innovations, trends and approaches of teaches of teaching economics at higher secondary level.
- applies the knowledge of the innovations, trends and approaches in actual class room teaching situations.
- develops skill in various activities pertaining to teaching and learning economics
- develops interest in knowing the recent developments in the economics curriculum at higher secondary level.
- develops positive attitude towards concepts, terms and procedures of teaching economics.
- appreciates the values of teaching economics at the higher secondary stage.

Unit – 1: Introduction to Economics Education
Introduction – Definition – Meaning – Types – Historical Perspective – Characteristics – Importance of Economics – Present Status of Economics.

Unit –2: Correlation in Economics Education
Correlation in Economics – Meaning – Correlation of Economics with – Geography, Civics, History, Politics, Mathematics, Statistics and Commerce.

Unit –3: Instructional Materials
Introduction – Types of Instructional Materials/Aids – Audio visual aids - Merits and Demerits – Diagrams – Aims of Using diagrams – Graphs – Significance of Graphs – Difference between Diagrams and Graphs – Black board- uses of Over Head Projector – Tables and its significance.

Unit –4: Instruction for teaching economics
Introduction – Individualized Instruction(II) - Computer Assisted Instruction (CAI) – Programmed Instruction (PI)- Procedure and steps.

Unit –5: Curriculum construction
Curriculum organization – Meaning –Need and Importance – Blue print – Higher Secondary and CBSE syllabus – Suggestions for important of Curriculum.

Unit –6: Psychological basis of Economics Teaching
Psychological basis – introducing different topics – Motivating students – for different lesson in Economics – Development of different motivating skills.

Unit –7: Data Resources
Data Resources – Meaning - Need and importance – Data collection – Primary and Secondary data resources and Economics – Classification of data.

Unit –8: Economics and Mother tongue
Economics in Mother tongue – Need and Importance - Prospects and Problems of teaching through Mother tongue – Practical suggestion teaching Economics through Mother tongue in electronic media.

Unit –9: Education Technology in Economics

Education Technology in Education – Programmed Instruction – Types – Advantages and Disadvantages.

Introduction – Objective – Importance of teaching skills – Types of teaching skills – Class based teaching skill – Field based Teaching skills.

Unit –10: ICT in Economics

Internet and its applications – Meaning – Working of Internet – e learning – Power point presentations - World Wide web – teleconferencing – Satellite – EDUSAT –QR code method – MOOC's - Swayam.

For Fast Track Learners

Current challenges facing the Indian Economy

Practical Works

- List down the characteristics of the subject matter Economics.
- Give examples for the instructional materials required to teach Economics.
- Prepare a programmed instruction for teaching any one lesson in Economics.
- Arrange the steps to collect the population census in an area.
- Classify the sources of economic data required to study economic development.

Text Books

1. Dr. M. Harikrishnan, (2006), "*Methods of Teaching Economics".* Thirmavalavan Publications – Chidambaram.
2. Dr. Radha, (2014), "*Value Education",* Prasanna Publishers and Distributors – Chennai.
3. Seema Sharma, (2004), "*Modern Teaching of Economics*", Anmol Publications Pvt. Ltd – NewDelhi.
4. Keith Lumsden, (1967), "*New Development in the Teaching of Economics*", Prentice Hall the Engle Wood, New Jercy.
5. Knopf and Keynon, (1960), "*The Teaching of Elementary Economics",* James and Status Holt Rinehart and Wiston, New York.

Supplementary Reading

1. Amita Yadav, The Teaching of Economics.
2. Vakil, Teaching of Economics.
3. Journal of Economics Education.
4. Vendanayagam, Hand Book for College teachers.

Course Outcomes

CO1: describe the present status of economics
CO2: correlate economics with geography, civics, politics, mathematics and statistics
CO3: make use of different types of instructional materials
CO4: motivate students for different lessons in economics
CO5: explain the prospects and problems of teaching economics through mother tongue.

Outcome Mapping

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4	PSO5
CO1		3												3	
CO2			3			3								3	
CO3		3												3	
CO4	3					3			3					3	
CO5					3			3				3		3	

Hours : 4

Learning Objectives (LO): The student teacher

- acquires knowledge of the terms and concepts regarding the various methods and techniques of teaching,
- understands the different types of curriculum, methods of teaching and technology of teaching.
- applies the knowledge in analyzing, selecting and adopting the suitable methods, techniques and for the purpose of teaching,
- develops skills in preparing curriculum, and using the suitable techniques in test construction.
- develops interest in knowing the recent development in the teaching methodology, and technological developments, and
- develops a desirable positive attitude towards the teaching of commerce.

Unit-1: Introduction to Commerce Education

Introduction of commerce education- historical perspective- commerce education in olden days- pre independent period- independent India- presents status of teaching Commerce and Accountancy.

Unit-2: Correlation in Commerce Education

Integration of Commerce with other school subject Politics, Geography, Civics, Mathematics, Sciences-consumer education- electronic accounting- VAT management education

Unit-3: Instructional Materials in Commerce

Audio-visual aids-classification, importantance- use of graphic materials- Pictures, Diagrams, Charts-Clipping from the news papers, original documents, office and commercial forms- Selection of appropriate aids for effective teaching of commerce.

Unit-4: Self Instruction Modules

Individualized self-instructional modules- programmed instruction- personalized system of instruction- computer assisted instruction- procedure and steps.

Unit-5: Curriculum Construction

Commerce and accountancy curriculum - principles to be borne in mind for curriculum construction – organization of subject matters – principles, types – concentric-topical, psychological patterns.

Unit-6: Psychological Basis of Commerce Teaching

Ways of introducing different topics- developing interest and attitude towards commerce education- motivating students for a commerce lesson – skill of introducing different topics in commerce and accountancy.

Unit-7: Data- Resources

Data collection and commerce – primary and secondary data resources and commerce – role of transport and communicationin commerce and trade – migration of people – inter dependence and interaction effects.

Unit-8: Commerce and Mother Tongue

Commerce and accountancy teaching through mother tongue – need and importance – prospects and problems of teaching through mother tongue – practical suggestionfor teaching commerce and accountancy through mother tongue in electronic media.

Unit-9: Technology in Commerce

Educational technology in learning commerce –Use of latest technology on commercial activities – commercial and educational broad casting – interactive video, tele-lecturing – commerce – software development in India and other countries.

Unit-10: ICT in Commerce

Internet and its application – meaning – working of internet - e-learning – World Wide Web - Tele conferencing – satellite - EDUSAT – educating commerce students in computer application- Training commerce students in ICT application.

For Fast Track Learners

Data Processing cycle -Tally

Practical Works

- Conducting commercial survey
- Visit to auditor's office.
- Visit to consumer club
- Analyze – educational telecast and broadcasting
- Prepare a budget analysis for a given period

Text Books

1. Kochhar, S.K. Methods and techniques og teaching, sterling publishers pvt. Ltd., New Delhi.
2. Passi, B.K., Becoming better teacher & micro teaching approaches, sahityamudrasolays, Ahanadabad, 1976.
3. Sampth et.al., introduction to education technology, sterling publishers, New Delhi, 1990.
4. Musseeman, Vernon A. and et al., Method of teacher accountancy, McGraw Hill Inc. USA, 1979
5. Sharma, R.A., technology of teaching, international publishing house , Meerut ,India, 1988.

Supplementary Reading

1. Ornistein, Allen C., and et al. Curriculum Foundation, principles and issues prentice hall, Englewood cliffs new jersey, USA, 1988.
2. Jangira and et al. Core Learning Skills, The Micro Teaching Approach NCERT, New Delhi, 1982.
3. Khan, M.S., Commerce Education, Sterling Publication Ltd. 1992.

Course Outcomes

The student teacher should be able to

CO1: explain the historical perspective of commerce education
CO2: correlate commerce with politics, geography, civics and mathematics
CO3: make use of appropriate audio-visual aids for effective teaching of commerce
CO4: apply the latest technology on commercial activities.
CO5: develops a desirable positive attitude towards the teaching of commerce

Outcome Mapping

CO/ PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PS O1	PS O2	PS O3	PS O4	PS O5
CO1			3								3				
CO2	3													3	
CO3										3	3				
CO4									3					3	
CO5								3							3

Year-I (2019-2020)   19BEDP101: Work Education Through Community Engagement   Credits : 2

Hours   : 2

Learning Objectives (LO): The student teacher
- acquires knowledge of work education
- understands the views, practices, theories and models related to work education
- applies knowledge in the sustainable improvement in quality of life and empowerment of community concerned
- develops skills and expertise in a collaborative manner between school family and community
- develops a sustainable community academic partnership that addressed social issues.

Unit 1: Work Education
Definition, Meaning, Nature of Work- Significance of Work Labour-Work and Livelihood-Work and Happiness/Satisfaction – Work Education: Purpose, Social, Economic and Pedagogic values of Work and craft education - Instructional Approach: Teacher's Orientation on the concept of work and involving students in activities that reflect work education in neighbourhood villages.

Unit-2: Thinkers-Theories and Models of work Education
Gandhi and Work Education- NaiTalim Model – Tagore's model of experiential learning – Shyama Prasad Mukherji's practices – Paulo Fiere dimensions on critical pedagogy – Vygotsky Social construction – John Dewey Perspectives

Unit-3 : Rural Community Engagement
Changing profile of Rural India – Socio-Economic-Political and cultural community goal setting – Participatory learning methods Rural Resilience: Vulnerabilities, Risk Reduction, Rehabilitation – Village Development, Disaster Management and Waste management

Unit-4: Community Engagement through Teacher Education
Community Engagement - School, Family and Community Partnership-Relationship between School and Community – Rationale and Methods of Community Engagement – School Management Committees – Role of Teachers and Headmasters for Community Engagement - Parents Participation levels in school- Establishing Rural Education interest groups and communities, Self Help groups.

Unit-5: Field Engagement and Experiences
Community Services and its impact-Documentation of the engagement activities – Involving in local practices related to art, craft, agriculture, indigenous occupations, waste management and disaster management planning and implementation of projects.

Text Books
1. Anthony, P.D (2001). The Ideology of Work, London: Routledge
2. Kolb, D.A (2014). Experiential Learning: Experience as the sense of learning and development. New Jercy: Pearson Press
3. MGNCRE, (2018). Experiential Learning, MHRD, Govt. of India

Supplementary Reading
1. Precle, J (2014). University Community Engagement and lifelong learning. New York: Springer International Publications.
2. MGNCRE, RCE manual and curriculum framework, Rural Immersion Mannuals, MHRD, Govt. of India

Course Outcomes

The student teacher should be able to

CO1: cultivate service learning
CO2: collaborate with community
CO3: develop co-curricular device projects
CO4: encourage civic leadership
CO5: foster social responsibility

Outcome Mapping

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4	PSO5
CO1		3													3
CO2							3							3	3
CO3		3		2						3					3
CO4	3						3	3		3				3	3
CO5					2			3							3

Learning Objectives (LO): The student teachers
- know the concept & holistic healthy its various dimensions and determinants
- understand the importance health and sports for development of holistic-health.
- develop positive attitude towards health and healthy habits.
- develop skill of maintaining health status, identify health problems and taking remedial measures.
- encourage the right habits of exercise, games, sports, sleep, rest and relaxation.
- sensitize physical fitness, correct postural habits and its development.

Unit-1: Determinants of Health Problems and Diseases

Concept of health, importance, dimensions and determinants of health; Health needs of children and adolescents, including differently-abled children

Understanding of the body system–skeleton, muscular, respiratory,
circulatory and digestive in relation to health fitness, bones, muscles and joints, their functions, common injuries of bones, common health problems and diseases–its causes, prevention and cure, immunisation
and first aid

Unit-2: Practices related to food hygiene:

Food and nutrition, food habits, timing of food, nutrients and their functions, diversity of Indian food, seasonal foods and festivals, economics of food, preservation of food value during cooking, indigenous and modern ways to persevere food, shift in food practices and its globalisation, practices related to food hygiene, malnutrition, including obesity, food and waterborne and deficiency diseases and prevention.

Unit-3: Physical fitness, Games and sports:

Physical fitness, strength, endurance and flexibility, its components, sports skills, indigenous and self-defence activities Games and sports - athletics (general physical fitness exercises), games (lead-up games, relays and major games) rhythmic activities, gymnastics and their impact on health.

Text Books
1. Dhanajoy, S. &Seema.K(2007) Lesson Planning: Teaching methods and class management in physical education, New delhi : Khal Sahitya Kendra.
2. Nash.T.N. (2006) Health and Physical Education, Hyderabad: Nilkamal Publishers.
3. Prasad,Y.V. (2006) Method of teaching Physical eEducation, New Delhi : Discovery Publishing house.
4. Mangal.S.K (2005) Health and physical education, Ludhiyana: Tandon Publication book Market.
5. Kanele, B.S & Kumar C.P (1996) Text book on health and physical education , Ludhiyana, Kalyana Publishers.
6. Reema.K(1996) Physical fitness, New Delhi: Khel Sahitya Sports Publication

Supplementary Reading
.
1. Ramachandran L.T &Dharmalingam (1993) Health Education A New approach New Delhi, Vikas Publishers Ltd.
2. Erikson O.B (1990) Sports medicine, health and medication, Enfield: Guninness Publishing Road.
3. Sangral.K (1977) Methods in physical education ,Ludhiyana, Prakash Brothers.

Course Outcomes

The student teacher should be able to

CO1: explain about the Body systems, Health Problems and Diseases
CO2: attain insight about malnutrition
CO3: cognize about Food, nutrition and Hygiene
CO4: gain awareness about Physical fitness, Games and sports
CO5: sensitize physical fitness, correct postural habits and its development

Outcome Mapping

CO/ PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PS O1	PS O2	PS O3	PS O4	PS O5
CO1		3										3			
CO2							3					3			
CO3		3										3			
CO4	3									3		3			
CO5						3			3			3			

Learning Objectives (LO): The student teacher
- acquires the knowledge of the fundamental or "formal properties" of art: line, positive/negative space, shade/tone, texture, color, etc.
- develops aesthetic awareness in the visual arts and in music,
- developsthe awareness of, sensitivity to and enjoyment of visual, aural, tactile and spatial qualities in the environment

Unit-1

Meaning and concept of arts and aesthetics and its significance - Developmental benefits of arts in education – Types of Art – strands in art .

Unit–2

Knowledge of Indian traditions and its relevance in education – integrate art forms in class room activities.

Unit–3

Different kinds of instruments – string instruments – blowing instruments – drums – patriotic songs – motivating students for stage performance.

Unit -4

Principles of art (balance, proportion, emphasis, variety, movement, rhythm and harmony).

Unit -5

Variety of art forms (performing arts- Dance, Music, visual arts – Drawing and Painting ,literary arts- Poetry and Drama)

Text Books
1. Louis V Newkirk , Crafts for everyone, Van Nostrand company Canada
2. Elements of art – virtual instructor.com
3. Elsie BuncgDonal(ed) , The book of creative Arts, octopus books ltd.,London
4. Sharma T R, An introduction to craft education In India , Indian publications Ambola
5. A.Pakthavachalam Tamil VedhaThirattu Part -2, Nallarpettai 2000
6. Dr.K.A.Pakkirisamy Bharathi, Isai Karuvoolam, Madhaldhazh, Chennai
7. Elliot W. Eisner, 2004 The Arts and the Creation of Mind by Yale University Press

Supplementary Reading
1. http://www.art-rageous.net/
2. Activity corner - http://www.kidspot.co.nz/
3. Middle School Painting & Drawing Activities http://www.education.com/

Course Outcomes

The student teacher should be able to

CO1:   use the various elements of art in their preparation of charts
CO2:   express their ideas through various art forms
CO3:   have aesthetic sense in their presentations
CO4:   give stage performance
CO5:   bring innovation in singing

Outcome Mapping

CO/ PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PS O1	PS O2	PS O3	PS O4	PS O5
CO1	2	3							1		3			3	
CO2				2			2								
CO3		2											3		
CO4															3
CO5			2			2				2		3			

Year-I (2019-2020) 19BEDP104: Exploring Library and Other Learning Resources   **Credits : 2**

Hours : 2

Learning Objectives (LO): The student teacher
- acquires information about library and different kinds of libraries
- acquires knowledge about the various types of e- resources
- understands the function of the various sections of the library
- develop skills to locate the required information
- develop interests in locating websites used for teaching and learning
- analyse about the various types of information/ learning sources

Unit 1: Exploring library
Role of library in promoting education – educational functions and research functions - various sections of library – kinds of libraries- academic- research and public libraries , e libraries – virtual library – digital library

Unit 2: Library Procedures
Classification – basis of classification - catalogue – accession No. – call No. - OPAC

Unit 3: Sources of Information
Types of learning resources- Documentary – primary, Secondary and tertiary Non documentary - e resources – E books – e journals – e magazines

Unit 4: Services provided by the library
Selective dissemination of Information (SDI) – Current awareness service – abstracting and indexing – reference service – reprography service –bibliographic services

Unit -5: World Wide Web – storehouse of information
Information resources – personal – institutional – commercial and educational Useful websites for teaching and learning

Text Books
1. Amjad Ali (2004) Reference services and the digital sources of information, essess publication , New Delhi
2. Chowdhury GG (2001) Information sources and searching on the world wide web, Library Association Publishing , London
3. Sharma C K, (2006) Library Management (vol 1 and 2) Atlantic publishers, New Delhi

Supplementary Reading

1. Sharma C K, (2006) A practice handbook of classified catalogue, Atlantic publishers, New Delhi
2. Sreepathy Naidu, R., (1989). Academic Librarianship, Gyan Publishing House, New Delhi.

Course Outcomes
The student teacher should be able to

CO1: differentiate the various kinds of libraries
CO2: use the various electronic resources
CO3: know the various functions of the different sections of the library
CO4: locate the various websites useful for teaching and learning
CO5: locate the various sources of information

Outcome Mapping

CO/ PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PS O1	PS O2	PS O3	PS O4	PS O5
CO1	2	3										2			
CO2							2					3			
CO3												2			
CO4									3						2
CO5									2	2					

Learning Objectives (LO): The student teacher
- acquires the knowledge of the concepts, terms and procedures in the teaching skills of Yoga.
- understands the techniques of yogic practices
- applies the knowledge to practice different yoga skills
- develops interest inusing different yogic practices
- develops A Positive Attitude Towards teaching Various methods of yoga

Unit – 1

I.

Introduction to Yoga : The Origin, Concept – Aims and development of Yoga – Principles of Yoga – Streams of yoga: Karma Yoga - Bhakti Yoga – Jnana Yoga – Raja Yoga : Ashtanga Yoga – Hatha Yoga – Yogic Concept of Human Body.

Unit – 2

Practical Training in Yoga : General Guidelines – Prayer – Starting & Closing. Breathing Practices for awareness –Hands in and out breathing – Hand Stretch breathing – Ankle Stretch breathing. Preparatory practices : Loosening Practices: Forward and backward bending – Lateral bending – Alternate toe touching – Spinal twisting.

Unit – 3

Practical Training : Techniques : Suryanamaskar – Starting Prayer / Mantra – 12 poses - Asana – Standing Position : Peraiyasana – Ekapadasana – Trikonasana. Sitting Position :   Vajrasana – Paschimotasana – Ushtrasana – Vakrasana. Prone Position : Makrasana – Bhujangasana –Shalabasana.   Supine Position :Uttanapadasana – Sarvangasana – Matyasana – Savasana.

Unit – 4

Practical Training : Techniques : Pranayama : Kapalabathi – Sectional Breathing – NadiShuddhi – Sitali – Sitkari – Sadanta – Nada Anu-Sandana Pranayama. Mudras : Chin Mudra – Chinmaya Mudra – Adhi Mudra – Brahma Mudra – Namaskara Mudra – Maha Mudra – Vishnu Mudra / Nasiga Mudra – Yoga Mudra.   Bandha :Jalandra Bandha – Uddiyana Bandha – Moola Bandha.

Unit – 5

Physiological, Psychological and Biochemical Benefits on various systems of human body :Asana- Pranayama - Mudra – Bandha. Meditation : Techniques - Guidelines and Benefits : Simple Meditation. Relaxation Techniques and Benefits : IRT: Instant Relaxation Technique – QRT : Quick Relaxation Technique – DRT : Deep Relaxation Technique.

Text Books
1. Swami Muktibodhananda, Hatha Yoga Pradipika, The light on Hathayoga, Bihar School of Yoga, Munger, 1985.
2. B.K.S. Iyengar, Light on Yoga, Harper Collin's publishers, 2005.
3. B.K.S.Iyenga, Light on Pranayama , Harper Collin's publishers, 2006.
4. Sri Ananda : The Complete Book of Yoga Harmony of Body and Mind (Orient Paper Backs : Vision Book Pvt. Ltd., 1982.

Supplementary Reading

1. Swami Sivananda, Practice of Yoga – The Divine Life Society, Shivananda Nagar, P.O. U.P. Himalayas, India, 2001.
2. Yoga, Asana, Pranayama, Mudras, Bandha: Yoga Publications Trust, Munger, Bihar, India

Course Outcomes
The student teacher should be able to

 CO1: understand the Principles of Yoga
 CO2: be able to perform preparatory practices
 CO3: perform Suryanamaskar and various yoga asanas
 CO4: acquire the techniques of Pranayama practices
 CO5: perform various classification of mudras

Outcome Mapping

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PS O1	PS O2	PS O3	PS O4	PS O5
CO1			3												3
CO2				3			3				2				3
CO3		3													3
CO4	3											3		3	3
CO5						3			3						3

Learning Objectives (LO): The student teacher
- acquires the knowledge of the concepts, terms and procedures in the teaching skills and Micro teaching
- understands the technique of using different teaching skills
- applies the knowledge to practice different teaching skills
- develops skills of using different teaching skills
- develops interest inusing different teaching skills
- develops a Positive Attitude Towards teaching Various Teaching Skills

Unit-1: Meaning and Scope of Teaching Skills

Meaning and Definition- Need and importance – Nature of teaching skills- Features of teaching skills-Characteristics-General classification of teaching skills-Special classification of teaching skills.

Unit-3: Description and Components of Teaching Skills

Meaning and Description and components of various teaching skills such as: The Skill Of Introducing a lesson, The Skill Of Explaining, The Skill Of Stimulus Variation, The Skill Of Reinforcement, The Skill Of Questioning- The Skill Of Using Blackboard, The Skill Of Illustrating with examples- The Skill Of Achieving Closure, The Skill Of Probing Questions, The Skill of using Audio-Visual aids- The Skill of recognizing Attending Behaviour.

Unit-3: Techniques for Developing Teaching Skills

Various techniques for developing teaching skills- Micro teaching-Origin of Microteaching-Purpose-Need-Characteristics-Objectives-Steps-Micro teaching cycle – Phases in Microteaching.

Unit-4: Planning Micro lesson

Steps and procedures in preparation of micro lesson- Preparation of Micro lesson plan for various teaching skills.

Unit-5: Organization of Microteaching

Selection of skills-Collection/preparation of instructional materials-Arrangements of facilities- Role allocation- Training in observation- Scheduling and time tabling – Implementation- Evaluation-Continuous search for improvement.

Text Books
1. Chris khiryacou, (1991) Essential teaching skills, Basil Blackwell limited, UK
2. Romesh Verma, (1998), Modern Trends in teaching Technology, Anmol Publications, New Delhi
3. A.Ram Babu, Micro teaching, Volume 1, Neelkamal Publications PVT limited , Hyderabad.

Supplementary Reading
1. Jangira, N.K. (1982). Core Teaching Skills- The Microteaching Approach. New Delhi: NCERT Publication.

Course Outcome

The student teacher should be able to

CO1: acquire the knowledge about the various teaching skills and micrteaching92techniques

CO2: understand the components of the various teaching skills such as skill of explaining, skill of reinforcement and skill of stimulus variation

CO3: apply the scientific knowledge to identify the most essential teaching skills

CO4: develop skill in practicing the various teaching skills one by one through micro teaching techniques

CO5: develop curiosity to know more about micro lesson plan

Outcome Mapping

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4	PSO5
CO1		3												3	
CO2			3											3	
CO3		3		3						3	2			3	
CO4				3	3									3	
CO5							3					2		3	3

I.COURSE OBJECTIVES:

The student teacher
1. acquires knowledge of work education
2. understands the views, practices, theories and models related to work education
3. applies knowledge in the sustainable improvement in quality of life and empowerment of community concerned
4. develops skills and expertise in a collaborative manner between school family and community
5. develops a sustainable community academic partnership that addressed social issues.

II.   COURSE OUTLINE:

Unit 1: Work Education

Definition, Meaning, Nature of Work- Significance of Work Labour-Work and Livelihood-Work and Happiness/Satisfaction – Work Education: Purpose, Social, Economic and Pedagogic values of Work and craft education - Instructional Approach: Teacher's Orientation on the concept of work and involving students in activities that reflect work education in neighbourhood villages.

Unit-2: Thinkers-Theories and Models of work Education

Gandhi and Work Education- NaiTalim Model – Tagore's model of experiential learning – Shyama Prasad Mukherji's practices – Paulo Fiere dimensions on critical pedagogy – Vygotsky Social construction – John Dewey Perspectives

Unit-3 : Rural Community Engagement

Changing profile of Rural India – Socio-Economic-Political and cultural community goal setting – Participatory learning methods Rural Resilience: Vulnerabilities, Risk Reduction, Rehabilitation – Village Development, Disaster Management and Waste management

Unit-4 :Community Engagement through Teacher Education

Community Engagement - School, Family and Community partnership-Relationship between School and Community – Rationale and Methods of Community Engagement – School Management Committees – Role of Teachers and Headmasters for Community Engagement - Parents Participation levels in school- Establishing Rural Education interest groups and communities, Self Help groups.

Unit-5: Field Engagement and Experiences

Community Services and its impact-Documentation of the engagement activities – Involving in local practices related to art, craft, agriculture, indigenous occupations, waste management and disaster management planning and implementation of projects.

III.LEARNING OUTCOMES

1. Cultivate service learning
2. Collaborate with community
3. Develop co-curricular device projects
4. Encourage civic leadership
5. Foster social responsibility
6. Promote personal growth

Text Book

1. Anthony, P.D (2001). The Ideology of Work, London: Routledge
2. Kolb, D.A (2014). Experiential Learning: Experience as the sense of learning and development. New Jercy: Pearson Press
3. MGNCRE, (2018). Experiential Learning , MHRD, Govt. of India

Supplementary Reading

1. Precle, J (2014). University Community Engagement and lifelong learning. New York: Springer International Publications.
2. MGNCRE, RCE manual and curriculum framework, Rural Immersion Manuals, MHRD, Govt. of India

Course Outcomes

The student teacher should be able to

CO1: enumerate the knowledge about the assessment and evaluation
CO2: synthesis issues in assessment and evaluation
CO3: analyze the key concepts such as formative and summative assessment, evaluation and measurement, tests, examination
CO4: differentiate kinds and forms of assessment that aid student learning
CO5: evaluate the use of wide range of assessment tools, select and construct these appropriately

Outcome Mapping

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	2										3				
CO2						2			3						
CO3		3											3		3
CO4				3				3		3					
CO5												2			3

Learning Objectives (LO): : The student teachers
- acquire knowledge of the concept and principles of Education for peace
- develop understanding of the concepts and its implications in Education for peace
- apply the knowledge of Education for peace in the analysis of present day educational system.
- develop interest in reading Education for peace issues.

Unit – 1: Peace as a Dynamic Social Reality

Peace Education – Meaning, Nature and concepts of Peace education – Aims and objectives of Peace education Highlights of various Philophies of peace Gandhi, Krishnamurthy, Aurobindo, Vivekananda, Rabindranath Tagore GijubhalBadheka, The Dalai Lama, initiatives at National and International levels.

Unit – 2: Non-violence for Peace and Conflict Resolution

Violence – Working definition relationship between peace and violence exposure to violence through media consequences – Factors that influence non-violence – Peace and conflict – Bases of conflict – Positive and Negative aspects of conflict – Types of conflict – Peace Education and Conflict Management Conflict Resolution.

Unit –3: Global issues and Peace Movements

Human Rights – Preservation of Ecology – Population Control – Economic Exploitation – Deprivation – Poverty – Equitable Economic World order – Gandhiji's contribution to peace studies – Non-aligned movement – Compaign for Nuclear Disarment – Role of world organization in promoting peace.

Unit –4: Integrating Peace Education in the present curriculum

1. Six Major Media of Integration
   i) Subject content ii) Teaching methods iii) Co-curricular activities
   iv) Staff development v) Classroom management vi) School management
2. Practical steps to build peace culture in schools.

Unit –5: Education for a culture of Peace

Critical reflection on the curricular processes.
   i) Healthy discipline practices in and outside classroom.
   ii) Symbols, activities and other structures in the school that reflect a multi-cultural ambiance
   iii) Experiences of different cultural identies, issues, challenges conflicts in the neighbourhood.

Critical Peadagogy of peace education – Ecological Thinking and respects of life (age 8 – 12) – Tolerance and respects for Human Rights (age between 11 – 16) – Social justice and civic responsibility (age 14 +) – Leadership and Global citizenship (age 16 +) – Knowledge, Attitude and skills to be learnt in each of them.

Text Books

1. Prof.S.P.Ruhela, Prof. Rajkumar Nayak, Value Education and Human Right Education, Neel Kamal publications, 2011, New Delhi.
2. Dr.Kirubacharles, Peace and Value Education, Neel Kamal Publications, 2012, New Delhi.
3. R.P.Veerabhadrappa, Teaching of Peace and Conflict resolution, Dotus press, 2007, New Delhi.

Supplementary Reading

1. Babu Muthuja, R.Usharani, R.K.Arun, Peace and Value Education, Centum Press, 2009, New Delhi.

Course Outcome

The student teacher should be able to

   CO1: understand the concept and principles of education for peace
   CO2: understand concept of Non-violence
   CO3: able to handle various types of conflict
   CO4: familiar with the various global issues related to peace movements
   CO5: to integrate peace education in the curriculum

Outcome Mapping

CO/ PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PS O1	PS O2	PS O3	PS O4	PS O5
CO1		3									3	3			
CO2							3					3			
CO3		3												3	
CO4	3									2	3				2
CO5						3			2						

I. Learning Objectives (LO): The student teachers
- acquire the knowledge on natural resources and the problems associated;
- know the different types of resources;
- understand the environmental hazards and pollutions;
- understand the major environmental problems in India;
- know the importance of environmental education in the school curriculum

Unit – 1 : Natural Resources and Associated Problems

Forest resources: Use and over-exploitation, deforestation. Timber extraction, mining, dams and their efforts on forests and tribal people.-Water resources: Use and over-utilization of surface and ground water, floods, droughts, water disputes.-Mineral resources: Use and exploitation-environmental efforts and extracting and using mineral resources.-Food resources: world food problems, charges caused by agriculture and overgrazing, effects of modern agriculture, fertilizer, pesticide problems, water logging, salinity, - Energy resources: Growing energy needs, renewable and non-renewable energy sources, use of alternate energy sources.-Land resources: Land as a resources, land degradation, man induced landslides, soil erosion, conversion of wet land into dry land.-Equitable use of resources for sustainable lifestyles.

Unit – 2 : Environmental Hazards and Pollution

Pollution: Meaning-Definition, Causes, effects and control measures of air, water, soil, marine, noise, thermal pollution and nuclear hazards-Solid waste management-causes, effects and control measures-Disaster management: Floods, earthquake-cyclone and tsunami-causes, effects and control measures.

Unit-3: Environmental Uses and Policies

Major environmental problems in India-Environmental protection and policies in India-Threats to bio-diversity: habitat loss, poaching of wildlife, endangered and endemic species of India-measures taken in India-Role of Green Tribunals in environment issues – state solar policy-Rain water harvesting.

Unit-4: Conversation of Environment

Environmental movements: Environmental movement in India: Silent valley movement, chipko movement, Narmada BachaoAndolon. Sustainable development: concept, meaning and strategies for sustainable development in India.-International Effects: The stockholom conferences(1972), Nairobi conferences(1982)-Brundhand commission(1983), The Rio Summit(1992)- Kyoto conferences(2012).

Unit-5: Environmental Education in the School Curriculum

Environmental education at primary, secondary and higher education level-Programmes field trips-workshops-exhibitions, video shows, nature clubs, nature walk and celebration of environmental day, saving energy, hygiene and sanitation programmes, eco friendly behaviour, organic farming-clean and green campus programmes-Role of teachers in conservation of environment-Swachch Bharat.

Text Books
1. Agarwal S.P and Agarwal J.C (1996) Environmental Protection, New Delhi.
2. Sharma R.A(2008) Environmental Education Meerut: Lall Books Depot
3. Sharma V.S(2005) Environmental Education, New Delhi, Anmol Publication

Supplementary Reading

1. Singh Y.K (2009) Teaching of Environmental Science, New Delhi, APH Publishing Corporation.
2. Joy P and Neal P (1994) The Handbook of Environmental Education, London, New Fetter Lane.

Course Outcomes

The student teacher should be able to

CO1:	acquire the knowledge on natural resources
CO2:	identify the environmental problems
CO3:	classify the environmental hazards and pollutions;
CO4:	evaluvate the major environmental problems in India;
CO5:	develops skills and undertake activities for the society against environmental pollutions

Outcome Mapping

CO/ PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PS O1	PS O2	PS O3	PS O4	PS O5
CO1		3									3				
CO2							3					3	3		
CO3				3						3					2
CO4						2			3					3	
CO5				3										3	

Learning Objectives (LO): The student teacher

- acquires the knowledge of the terms and concepts used in curriculum development,
- understands the principles, designs, development and evaluation of curriculum,
- applies the knowledge in analyzing the different types of curriculum and their evaluation.
- develops skill in preparing curriculum design.
- develops interest in studying books journals and articles on curriculum development.
- develops a desirable positive attitude towards curriculum development.

Unit-1: Nature and Scope of Curriculum

Curriculum – Meaning - Definition – Scope – Curriculum as a plan, as experience, a subject matter or content – Nature , Scope and Types of Curriculum – Understanding curriculum reforms and its impact on school structure, system, and school culture.

Unit-2 Foundations of Curriculum

Foundations of curriculum development – Philosophical, Sociological and Psychological. Creating a supportive school environment for curriculum change, Determinants of curriculum.

Unit-3: Aims and Objectives

Aims and Objectives of Education – Taxonomical objectives – Cognitive, Affective and Psychomotor Domains, Strategies for Effective curriculum – Improving the quality of teaching and learning – Localization of the curriculum – Learning life skills – Co-curricular activities – Special education needs (SEN). The physical school environment.

Unit-4: Curriculum Process

Curriculum Process – Formulation of objectives, selection of learning experience and content organisation. Designing Integrated and Interdisciplinary learning experience, Integration of learning experience relating to work experience and sensitivity to gender disparity.

Unit-5: Curriculum Design

Curriculum Design – Dimensions – Integration, Sequence, Articulation, Balance and Continuity – Sources for Curriculum Design, Activity Learning Method (ALM), Minimum level of Learning (MLL) Method.

Unit-6: Types of Curriculum Designs

Representative Curriculum Design – Subject centered design, Learners centered design, Experience centered designs, Life centered design.

Unit-7: Curriculum Transaction

Curriculum Transaction – Concept of teaching and learning, Relationships – Constituents – effective teaching and learning – Role of ICT and its importance – Various modes of ICT (CAL,CAI) for transaction, their strength and limitations.

Unit-8: Curriculum Evaluation

Curriculum Evaluation – Approaches to evaluation – evaluation Methods – Tyler's Evaluation Model – Stake's congruence – Contingency Model, Stuffle Beams (CIPP) Model – Hilda Taba Model.

Unit-9: Agencies of Curriculum

Agencies of Curriculum Development – Schools, Teachers, Principals, Educationists, NCERT, SCERT, NCTE, UNESCO, DTERT.

Unit-10: Future directions and Approaches

Education Policy Issues – Guiding policy principles – Understanding the curriculum – Educational Assumptions – Equal opportunities for Boys and Girls – HIV/AIDS and the curriculum – Specific Goals of the education System- Desired learners profile – Future directions for curriculum development, Approaches to forecasting new curricular areas.

For Fast Track Learners

Developing curriculum suitable to the present day context – suggesting a new model for curriculum evaluation .

Practical Works

- Describe various stages of curriculum development. Discuss how these stages are interlinked?
- Discuss different models of curriculum planning. Which model you consider the best and why? Justify your answer with the help of suitable examples?
- As school management, you will be challenged to manage the shift in curriculum from Foundation phase to Intermediate Phase to Senior Phase. What are the important considerations for learners, teachers, and curriculum planning? How will you manage change in each of the above?
- Monitoring is an important management function. It serves a purpose at all three management levels, and has a role in ensuring quality teaching and learning practice. Discuss in your groups monitoring processes and practices, and how it can support your management function?
- Describe in brief different models of curriculum planning. Which model you consider the best and why? Give suitable example in justification of your answer?

Text Books

1. Aggarwal, J.C. (1990): Curriculum Reforms in India, Delhi: Doaba House
2. Harper & Row.
3. IGNOU (1992): Curriculum Development for Distance Education, (ES-316), Blocks 1 and 2, New Delhi.
4. J. Dewey (1966): The Child &the Curriculum -The School &Society, Phoenix, USA
5. J. Lee (1964): Evaluation for Course Improvement in New Curricula, New York:
6. Jersey, U.K.
7. Kelly, A.V. (1989): The Curriculum:Theory and Practice, London; Paul Chapman Publishing.
8. Mamidi, M.R. and Ravishankar. S. (1984): Curriculum Development and Educational Technology, New Delhi: Sterling Publishers.
9. Ornstein, C. &Hunkins P. (1988): Curriculum, Foundations, Principles and Issues, New Sharpes, D.K. (1988): Curriculum Traditions and Practices. London: Routledge
10. Stenhouse, L. (1975): An Introduction to Curriculum Research and Development. London: Heinemann

Supplementary Reading

1. Wheeler, D. K. (1967): Curriculum Process. University of London Press.
2. NCERT (1988), National Curriculum for Elementary and Secondary Education - A Framework, New Delhi.
3. Lawton, D. et al (1978), Theory and Practice of Curriculum Studies. Routledge and Kegan Paul London.
4. Goel, B.S and Sharma, J.D. (1984), A Study of Evolution of the Textbook,
5. NCERT (1975), The Curriculum for the Ten-year School – A Framework

Course Outcomes

The student teacher should be able to

CO1:   explain the scope of curriculum
CO2:   analyse the taxonomical objectives of education
CO3:   design different types of curriculum
CO4:   apply the various modes of ICT in curriculum transaction
CO5:   make use of different models in curriculum evaluation

Outcome Mapping

CO/ PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PS O1	PS O2	PS O3	PS O4	PS O5
CO1			2	1		2			3			1		2	
CO2	2	2	1	2											
CO3		3				2			3			3			
CO4					3		2	3						3	
CO5								3							3

Learning Objectives (LO): The student teacher
- acquires knowledge of the importance of universalization of school education and the constitutional provisions for realizing it
- understands examine the issues and concerns related to universalization of school education
- understand the importance of indicators, standards and strategies for enhancement of quality in school education
- understand the action/measures taken for environmental conservation and its sustainability at the international level
- understand the strategies for development of values and life skills and the role of the teacher in developing values and life skills.
- understand the need and importance of education for peace and human rights and the national and international efforts towards it
- applies the strategies for realization of UEE and the outcomes of their implementation

Unit-1:Universalization of School Education
     Constitutional Provisions of universalization of school education Rights to Education and Universal access, enrolment, retention, participation and achievement Issues in UEE : Equality and equity; meaning, need and importance, constitutional provision for ensuring equity

Unit-2: Inequity and Educational Provisions
     Nature and forms of inequity with reference to Gender, Socio-economic status, socio-cultural status, Minority(Linguistic & Religions), locality(Rural-Urban-Tribal) public-private schools, children with special needs(CWSN), Inclusive Education for addressing inequality - Causes of Inequity and Educational Provisions - SSA, RTE and RMSA: provision for addressing inequality

Unit-3:Quality in Education
     Concept of quality in Education; Indicators of quality Education –Academic and Organisational, student outcomes- Quality improvement in Education –setting up standards for performance, supporting inputs to improve achievement, adopting flexible strategies for the acquisition and use of inputs, and monitoring performance

Unit-4: **Organisational Strategies Of Quality In Education**
     Organisational strategies for enhancement of quality in school education, Resource Support institutions for quality enhancement: NCERT, NUEPA, NCTE, NIOS, SCERT, CTE, IASE, DIET/DRC –structure, functions and ongoing programmes- Role of teacher for enhancing quality in education.

Unit-5: **Human Rights**
     Human Rights: Concept; Constitutional and Institutional safeguards -Domains of Human Rights: RTI, Poverty, Child Labor, Child Rights, Rights of women empowerment; Role of Education in safeguarding Human Rights.

Unit-6: Peace Education
     Peace Education: concept and relevance in National and International (UN & UNESCO) contexts; Danger to Social Security ; terrorism, war, natural calamities (Disaster management), their impact on quality of life, Threat to peace in regional, national and global contexts and their impact on quality of life- Role of teacher education in promoting peace: implication for pedagogy.

Unit-7: **Education For Conservation Of Environment**

Protection and Conservation of environment –need, issues and importance in global and local contexts. Policies for protection and conserving environment- Measures for environmental conservation : Management of Natural resources, Bio-diversity .

Unit-8: **Environmental Education Curriculum**

Environmental Education : Integration of environmental concerns in school curriculum- Strategies for sensitizing learners towards protection of environment and its conservation, Role of the teacher in promoting conservation.

Unit-9: **Value Education**

Values: concept, classification, Indian philosophical thought and values(Purushartha and PanchaKosha), Reverence for life, unity of all life and being); tolerance: values in modern Indian context –preamble of the Indian Constitution, Rights and Duties of a citizen, Personal, Social, Spiritual and universal values Value Education and Role of the teacher.

Unit-10: Life-Skill Education

Life-skill education –meaning, concept and importance- Ten core life-skills recommended by WHO- Strategies for developing individual life-skills at different levels(elementary and secondary)- Role of the teacher and community for facilitating and promoting learner's life skill.

For Fast Track Learners

Latest Education Policy- Suggestions for quality improvement in School and Higher Education-Using Technology for Value inculcation-Analyzing latest anti social events to meet them through Education-Latest Technological tools for Evaluation.

Practical Works

- Presentation on the reports and policies on USE (Universalization of school education)
- Conduct of survey of government and private schools to identify various forms of inequality
- Assessment of quality education in any School as per the organizational/academic indicators
- Analysis of any one text book with regard to incorporation of values/Human rights education
- Observation and reporting on violation of child rights in any locality

Text Books

1. Anand, C.L. et al (1993) Teacher and Education in Emerging Indian Society, NCERT, New Delhi
2. GOI (1986), National Policy on Education.MHRD, New Delhi
3. GOI (1992), Programme of Action (NPE), MHRD.
4. GOI (1992), Report of Core group on Value Orientation to Education, Planning Commission.
5. Glasser, W.(1990), The Quality School : Managing students without Coercion, New York: Perennial Library
6. Kaur, B.(2006), Teaching Peace, Conflict and Pride, New Delhi: Penguin Books.
7. Kumar, Arvind(2003) Environmental Challenges of the 21st Century, New Delhi : APH Publishing Corporation.
8. Kumar Krishna (1996). Learning from Conflict, New Delhi: Orient Longman
9. Ministry of Law and Justice (2009), Right to Education Act 2009, New Delhi, Govt. of India.

10. Ministry of Education, Education-66,EducationCommissio and National Development, Ministry of Education, Govt. of India 1966
11. Mohanty, J. (1986), School Education in Emerging Society, Sterling Publishers, New Delhi
12. NCERT (1986), School Education in India –Present Status and Future Needs, New Delhi.
13. NCERT (1992) Education in Values A Source Book(eds) Seshadri, C. Et al, NCERT, New Delhi
14. NCERT (1996), Human Rights, A Course Book, New Delhi.
15. NCTE (1997).Human Rights and National Values for Teacher Educators. New Delhi.
16. NCERT (2005) National Curriculum Framework 2005, New Delhi.
17. Muthumanickam.R,(2004)   Educational Objectives for   effective planning and Teaching, Cyberlandpublishers.Chidambaram.
18. UNDPA, Human Development Report, New Delhi, Oxford University Press.

Supplementary Reading

1. UNESCO, (2004) Education for All: The Quality Imperative EFA Global Monitoring Report, Paris.
2. Varghese, N.V. (1995), School Effects on Achievement: A Study of Government and Private Aided Schools in Kerala. In Kuldip Kumar (Ed.) School Effectiveness and learning Achievement at Primary stage: International perspectives, NCERT, New Delhi.
3. UNESCO (2001) Learning the way to peace: A UNICEF (2000); Defining quality in education, New York, Programme Division (Education).
4. UNESCO (2012). Shaping the education of tomorrow: 2012 Report on the UN decade of education for sustainable development, Paris.

Course Outcomes

CO1: explain the universalization of education and the constitutional provisions
CO2: identify the indicators of quality education
CO3: safeguard human rights through education
CO4: promote peace through education
CO5: develop strategies for learners towards environmental protection and it s conservation

Outcome Mapping

CO/ PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PS O1	PS O2	PS O3	PS O4	PS O5
CO1	3						2	3			2				
CO2	2		3					2					3		
CO3							2	3						2	
CO4							2	3				3		2	
CO5							2	3						2	

நோக்கங்கள்:
1. மாணவர்கள் மொழிகளின் பொதுஅறிமுகத்தையும்,தமிழ் மொழியின் சிறப்பினையும் அறிந்துகொள்ளுதல்.
2. மாணவர்கள் தாய் மொழியின் பல்வேறுபயிற்றுமுறைகளைப் புரிந்துகொள்ளுதல்.
3. மொழிப்பெயர்ப்பு,மொழியாக்கம் இவற்றின் அடிப்படைவிதிகளைஅறிதல்.
4. சிறந்தவாய்மொழிப் பயிற்சிமற்றும் எழுத்தாற்றலைவளர்த்துக் கொள்ளல்.
5. வினாத்தாள் அமைத்தல் திறன்களைவளர்த்துக் கொள்ளல்.

அலகு-1
திராவிடமொழிகள் - தென் திராவிடமொழிகள் - தமிழன் சிறப்புகள் - தாய்மொழிவழிக்கல்வி– சிறப்பியல்புகள் - இரண்டாம் மொழிவழிக் கல்வி–சாதகபாதகங்கள் - பைந்தமிழ் மொழியைபயிற்சிமொழியாக்கல் - பள்ளிகளில் தமிழ்ப் பாடத்தின் இன்றையநிலை.

அலகு-2
தமிழ்ப் பாடம் கற்பித்தலின் நோக்கங்கள் - பயன்கள்,பண்டையகாலகற்பித்தல் முறைநிறைகள்,குறைகள் - இலக்கண நூல்கள் வழி ஆசிரியர் - மாணரவர் - கற்பித்தல் முறைபற்றியவிளங்கங்கள் - அன்றுமுதல் இன்றுவரைமாறிவரும் கல்வியின் நோக்கங்கள்.

அலகு-3
பல்வேறுவகையானபயிற்குமுறைகள் - விளையாட்டுமுறை–நடிப்புமுறை–செயல்திட்டமுறை– ஒப்படைப்புமுறை–படைப்பார்வமுறை–நேரடிஅனுபவமுறை–தனிப்படுத்திகற்பித்தல் முறை–வகுப்புமுறை– மேற்கண்டமுறைகளின் நிறை,குறைகள்.

அலகு-4
கட்டுரைப் பாடம் கற்பித்தலின் நோக்கங்களும்,முறைகளும் - கட்டுரை,எழுதுவதன் வளர்ச்சிநிலைகள் - வகைகள் - சொற்றொடராக்கப் பயிற்சிகள் - வாழ்க்கைவரலாற்றுக் கட்டுரை– வருணனைக் கட்டுரை–சிந்தனைக் கட்டுரை–கற்பனைக் கட்டுரை–படக் கட்டுரை–கதைக் கட்டுரை– விவாதக் கட்டுரை–உரையாடல் கட்டுரை–ஆய்வுக் கட்டுரைபோன்றனஎழுதும் முறைகள் - பயன்கள்.

அலகு-5
வாய்மொழிப் பயிற்சி - இன்றியமையாமை–நோக்கங்கள் - பயன்கள் - உச்சரிப்பில் ஏற்படும் சிக்கல்கள் - மனப்பாடம் செய்தலின் இன்றியமையாமை–திருந்தியபேச்சில் பொருந்தியநல்லியல்புகள் - திருந்தியபேச்சினைவளர்க்கத் துணையாகும் இலக்கியங்கள்,நாடகங்கள் வாய்மொழிப் பயிற்சியினைப் பல்வேறுநிலைகளில் அளிப்பதற்கானமுறைகள்.

அலகு-6
மொழிபெயர்ப்புக் கற்பித்தல் தேவையும் இன்றியமையாமையும் இருமொழி,பன்மொழிபுலமையின் தேவை - கூகுள் மொழிபெயர்ப்பு–மொழிபெயர்ப்பின் வகைகள் - மொழிபெயர்ப்புகொள்கைகள் மொழிபெயர்ப்புசிக்கல்கள் - மொழிபெயர்ப்பின் பயன்கள்.

அலகு-7
துணைப்பாடம் கற்பித்தல் - நோக்கங்கள் - முறைகள் - பயன்கள் - அகன்றறபடிப்பிற்குஅடித்தளம் அமைத்தல் - தானேகற்கும் பழக்கத்தைவளர்த்தல் - மாணவரைநல்வழிப்படுத்தும் நீதிக்கதைகளின் தேவையும் முக்கியத்துவமும்.

அலகு-8
படித்தல் பயிற்சி–ஆர்வமூட்டல் - தேர்ந்தெடுக்கப்பட்டதலைப்புகள் - பலவகைப் படிப்புமுறைகள் - எழுத்துமுறை–சொல் முறை–கதைமுறை–குறைநிறைகள் - வாய்விட்டுப் படித்தல் - வாய்க்குள் படித்தல் - ஆழ்ந்தபடிப்பு–அகன்றபடிப்பு–படிப்பின் படிப்படியானவளர்ச்சிநிலைகள்.

அலகு-9
பேச்சுப் பயிற்சி–திருத்தமாகப் பேசுதல் - இலக்கணவழுவின்றிப் பேசுதல் - பேச்சுத் திறன் வளர் பயிற்சிகளைஉயர்நிலை,மேல்நிலைவகுப்பினருக்குஏற்பபாடப் பகுதியைஅமைத்துக் கொள்ளுதல் - ஆர்வத்தைத் தூண்டும் தலைப்புகளைப் பற்றிஉரையாடுதல் - சிறுவர் பாடல்கள் - ஆட்டப்பாடல்கள் - கதைசொல்லுதல் - கலந்துரையாடல் - சொற்போர் - சொற்பொழிவுகள்.

அலகு-10

தமிழ் கற்பித்தலின் விளைவுகளைமதிப்பிடல் - பல்வேறுநிலைகளில் கற்பித்தலுக்கானநோக்கங்களைபகுத்தாய்தல் - ஆசிரியர்களால் உருவாக்கப்படும் தேர்வுகள் - தரப்படுத்தப்பட்டதேர்வுகள் - தேர்வுசீர்திருத்தங்கள் - தேர்வின் பண்புகள் - நம்பகத் தன்மை—ஏற்புடைமை—பயனுடைமை—புறவயத் தன்மை—நல்லமதிப்பீட்டுக் கருவியின் பண்புகள் - குறையறிசோதனை—அடைவுச் சோதனை. மையப்போக்குஅளவைகள் - வீச்சு—திட்டவிலக்கம் - கால்மான் விளக்கம் - தரஒட்டுறவுகெழுவிளக்கம்.

மீ திறி ழை தைகி ் கானதமீ கீ பீ ் ் ் றைகி

பள்ளிகளில் நடைபெறும் நிகழ்வுகளுக்கானஆவணங்கள் தயாரிப்பது,பராமரிப்பது,வழங்குவதில் பயிற்சியளித்தல்,மாணவர்களுக்கானஅரசின் சட்டங்கள்,சலுகைகள்,செய்யவேண்டியகடமைகள் குறித்துவிழிப்புணர்வைஏற்படுத்துதல். சமுதாயபிரச்சனைகள் மற்றும் விழிப்புணர்வுகுறித்துகதை,கட்டுரை,கவிதை,துணுக்குகள்,நாகரீகமானநகைச்சுவைகள்,பாடல் மற்றும் நாடகங்கள் எழுதிவகுப்பில் அரங்கேற்றம் செய்யவைத்தல்.

செய்முறைபயிற்சி:
1. தனித்தமிழில் விளம்பரம் எழுதுதல்.
2. தனித்தமிழில் அழைப்பிதழ் எழுதுதல்.

கற்றல் வெளிப்பாடுகள்

இப்பாடத்தைபயிலுவதன் மூலம் மாணவஆசிரியருக்கு

- திராவிடமொழி,தமிழ் மொழிஆகியனவற்றின் முக்கியத்துவங்களைஅறிந்துகொள்ளஎமுடிகின்றது.
- பைந்தமிழின் பல்வேறுபயிற்றுமுறைகளைப் புரிந்துகொள்ளஎமுடிகின்றது.
- மொழிபெயர்ப்புமற்றும் சோதனைத்தாள் வடிவமைப்புபோன்றனவற்றில் அதிகஆர்வம் உண்டாகிறது.
- பேசும் திறன் மற்றும் எழுதும் திறனில் நாட்டம் அதிகரிக்கின்றது.

Mapping with Programme outcomes											
Cos	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	2				2			2				
CO2	3		2				3	3	2			
CO3	3		3	3		3				3		3
CO4	3					3		3			3	
CO5		3		3								

பார்வை நூல்கள்:

1. இரத்தினசபாபதி. பி. 1997,செம்மொழிக் கல்வி,சாந்தாபப்ளிஷர்ஸ்,சென்னை.
2. இரத்தினசபாபதி. பி. 2008,கல்வியில் தேர்வு,சாந்தாபப்ளிஷர்ஸ்,சென்னை.
3. வேணுகோபால், இ.பா, 2008,பைந்தமிழ் கற்பிக்கும் முறைகள்,சாந்தாபப்ளிஷர்ஸ்,சென்னை.
4. கோவிந்தராசன். மு, 1980,நற்றமிழ் பயிற்றலின் நோக்கமும் முறையும்,தேன்மொழிபதிப்பகம்,சென்னை.
5. சுப்புரெட்டியார். இரா. 2001,தமிழ் பயிற்றும் முறை,மணிவாசகர்,பதிப்பகம்,புதுத்தெரு,சிதம்பரம்.

Learning Objectives (LO): The student teacher
- acquires the knowledge of the concepts, terms and procedures in the pedagogy of English
- understands the concepts, terms and procedure in the content and methodology of teaching English
- uses the knowledge in actual classroom situations
- develops interest in various activities pertaining to teaching and learning of English
- develops interest in knowing recent developments in content and methodology of teaching English
- develops positive attitude towards teaching and learning of English
- appreciates the contribution of English language to the process of teaching and learning

Unit-1: Lesson Planning

Advantages - Features of Lesson Planning - unit plan - Lesson Plan format for teaching of Prose, Poetry, Grammar and Composition - model lesson plan. 76

Unit-2: Instructional Procedure

Aims and objectives of teaching prose - Steps involved in teaching of prose -poetry - - grammar - methods - inductive - deductive - kinds of grammar -prescriptive - descriptive - formal - functional grammar - composition - types - oral - written - kinds - free - controlled - guided - correction of composition.

Unit-3: Materials and Media

Need and importance of audio visual aids - advantages - classification -selection - preparation and use of instructional materials and Media for effective teaching of English - language laboratory.

Unit-4: Learning Resources

Reference material - print media - textbook - Dictionary - Thesaurus -Encyclopedia - web based learning - Internet and its applications - e-learning -m-learning - teleconferencing - EDUSAT.

Unit-5: Effective Communication

Need and importance - elements of communication - communication cycle -barriers for effective communication - types of communication - strategies for improving communication skills.

Unit-6: Innovative Trends In ELT

Programmed learning - Individualized Instruction - CAI - CAELL - CALL -concept - meaning ~ principles - types -=—adremtages and disadvantages -collaborative learning."

Unit-7 : Testing and Evaluation

Characteristics of good test - construction and administration of an achievement test in English - weightage - types of test items - test design and blue print - scoring key - Question Bank.

Unit VIII Diagnostic Testing and Remedial Teaching

Common errors in English usage - causes for errors - types of errors - oral -written - lexical - measures for correcting errors - organizing remedial programmes.

Unit-9 : Professional Growth of Teachers

Professional competencies of English teacher - Maxims of teaching - In service and Pre - Service Training to language teachers - quality improvement programmes in ELT.

Unit-10 :**Recent Research in Language Education**

Research in ELT - improving professional competency in ELT - role of EFLU -NCERT - RIE and The British Council - recent trends - current issues in ELT.

For Fast Track Learners

Meaning – Definition – Sources – Principles – Advantages – Main Components – organization of Subject matter – Task analysis

Practical Work

1) Prepare innovative teaching aids for teaching of grammar.
2) Write a review of a book that you have recently read.
3) Discuss the greatness of Dr. Kalam by forming into groups.
4) Narrate of a story with a good social message.
5) Conduct a seminar on topics of prescribed curriculum for ELT.

Text Books

1) Ambedkar, V (2011) Teaching of English in Indian Context, Orathanadu: Annaveera Publishers
2) Anne, V.K., 2001. Methods of Teaching English. Hyderabad: New Era Publications.
3) Baruah, T.C., 2006. The English Teachers Handbook. New Delhi: Sterling Publishers.
4) Close, R.A., 1999, English as a Foreign Language. London: Longman.
5) Dash, B.N., 2007. Teaching of English .. New Delhi: Dominant Publishers
6) Halliday, M .A.K., 1998. Language as a Social Semiotic. Lc no on: Arnold Publications.
7) Jack, Richards, 2012. Approaches and Methods in Language Tear-nig. London: Cambridge
8) Jindal, D.V., 2008. An Introduction to Linguistics. New Delhi: Pre   ;ce Hall.
9) Krishna Babu, S., et.al. 2009. Reading Disabilities. New Delhi: Soi. 'U.
10) Kohli, A.L(2006) Techniques of Teaching English. New Delhi: Uhanapat Rai Publications.
11) Kishnaswamy, N., 2005. Teaching of English Grammar. Hennai: T.R.Publications.

Supplementary Reading

1)   Mowla, Shaikh, 2006. Techniques of Teaching   English. Hyderabad: Neelkamal.
2)   Pahuja, N.P., 2009. Teaching of English. New Delhi: Anmol Publications.
3)   Swan, Michael, 2002. Practical English Usage. Oxford: OUP.
4)   Venkateswaran, S., 2011. Principle of Teaching English. New Delhi: Vikas Publishing House.
5)   Vallabhi, J.E., 2012. Teaching of English II: Principles and Practices. Hyderabad: Neekamal.

Course Outcomes

CO1: acquire the instructional procedures for teaching of prose, poetry grammar& composition
CO2: develop the skill of effective communication in English
CO3: understand the innovative trends and approaches in ELT
CO4: comprehend the role and importance of various learning resources
CO5: develop interest in professional growth of teachers

Outcome Mapping

CO/ PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PS O1	PS O2	PS O3	PS O4	PS O5
CO1		3										2			2
CO2				3											2
CO3				2	3				3						2
CO4															
CO5							2								1

Learning Objectives (LO): The student teacher
- acquires knowledge of the Planning For Instruction in the teaching Mathematics.
- understands the factors behind Media Selection of teaching Mathematics. The purpose of Review, assignments
- applies the knowledge in ICT Based Learning &Teaching in actual class room situation
- develops skill in preparing multimedia lessons to teaching and learning Mathematics
- develops interest in knowing recent Research in Mathematics Education
- develops scientific attitude towards the teaching and learning.

Unit -1: Planning For Instruction
Long term plan, Medium term plan, short term plan-Key questions for lesson planning-Stages of planning- Identifying the need for instruction-Planning for Differentiated Instruction-Ways of differentiation Instruction –Universal design learning-Principles of Universal design learning –Steps for Creating visual media.

Unit-2: Media Selection
Factors in Media Selection 1.Physical attributes of media (Visuals, Printed materials, Sound, Motion, Colour, Real objects) 2. Learner characteristics Instructional setting and Categories of learning outcome, events of Instruction, task characteristics 3.Practical factors-Factors affecting media selection- Use of media in Education-Instructional multimedia technology-Benefits of multimedia technology(Learner, Instructor, Administrative) – Issues concerning multimedia technology.

Unit -3: ICT Based Learning &Teaching
Teaching and Learning by Web Tools: Open Source Content – Wikipedia, Wiki Educator. Curriki, Blog Discussion Group, Online Forum, Online Video Conference, Social Networking – Orkut, Face Book, Twitter, Whatsapp – Instructional Use.

Unit- 4: Evaluation Of Teaching
Purpose of evaluating teaching – Sources for teacher evaluation-Self-evaluation, Social, Political context-Teacher Accountability- Modes of Accountability, Legal/contractual, Moral, Social, Intellectual, professional.-Suggestions for enhancing Teacher Accountability-Obstacles to Quality teacher evaluation.

Unit-5: Diagnostic Difficulties In Teaching
Diagnosis –Principle of Diagnosis-Steps – Importance – Identification of Students' Difficu1ties in Learning Mathematics. Planning- Development-Remedial Instruction

Unit -6: Creativity In Learning
Creative Thinking in Mathematics.Imagination- Significance-Sensation And Imagery-Types Of Imagination-Nature-Characteristics-Nurturing and Stimulation of Creativity-Conditions that enhances Mathematical Creativity

Unit- 7: Review
Meaning – Review Of Units – Need And Importance-Characteristics Of A Good Review Of A Mathematics Lesson.– Types 1.Daily Lesson Review 2.Topical Review 3.Unit Plan Review 4.Co-Operative Review 5.Review By Application – Need And Importance-Characteristics Of A Good Review Of A Mathematics Lesson.

Unit- 8: Assignment
Aims-Types of assignments in Mathematics (Preparatory, revision, study, remedial, Project, experience, problem, practice)– Individual assignments – Group assignments –

Home assignments – Criteria of assignments-Procedure –significance-Teacher's role-Difficulties in the preparation-Advantages and Disadvantages

Unit -9: Action Research

Meaning- Characteristics of Action Research-Difference between Action Research and Fundamental Research-Steps-Advantages-Illustration.

Unit- 10: Research In Mathematics Education

Need For Research in Mathematics Education – Problem in Teaching – Learning Process of Mathematics – Outcomes of Research – Learning To Understand How Children Learn Mathematics.

For Fast Track Learners

Technology in Teaching of mathematics   -Flipped Classroom- IMPACT

Practical Works

- Preparation of Multimedia instructional materials on mathematics
- Creating Blogs by the student and arranging Blog Discussion Group in the class room.
- Drafting recent reports on the research findings of the Mathematics Education
- Identifying any one of the problem during teaching practice and preparing Action Research.
- Preparing assignments about the significance and limitations of various Social Networks

Text Books

1. Robert.A.Reiser&Robert.M.Gagne, (1983) Selecting Media for Instruction, New Jersey
2. Lyacremor –Hayon (1993) TECAHER SELF- EVALUATION, Teacher's in their own mirrors, Kluwer Academic Publishers
3. Kenneth.D.Peterson, (2000) Teacher evaluation, Sage Publications, New Delhi
4.

Supplementary Reading

1. James .H.Stronge, (2006) Evaluating Teaching:A guide to current thinking and best Practice, Corwin Press, US of America.
2. Tracey.E.Hall, Anne Meyer, David.H.Rose, (2008) Universal design learning in the classroom, The Guilford Press, New York

Course Outcomes

The student teachers should be able to

CO1: acquire the basic knowledge about planning lesson and ICT based teaching of Mathematics at higher secondary level.
CO2: understand the media selection and creativity in Mathematics
CO3: apply the scientific knowledge to identify the teachers accountability and students difficulties in learning Mathematics
CO4: develop skills in reviewing lessons in Mathematics
CO5: develop interest in knowing more about the assignments in Mathematics

Outcome Mapping

CO/ PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PS O1	PS O2	PS O3	PS O4	PS O5	PS O6
CO1		3					2		3					2	2	
CO2					3				2							
CO3							2						3	2		
CO4				2		2										
CO5				2								2				

Learning Objectives (LO): The student teacher
- acquires knowledge of the Planning for Instruction in the teaching Physics
- understands the factors behind Media Selection in teaching Physics and the purpose of Review and Assignments
- applies the knowledge in ICT Based Learning and Teaching in actual class room situation
- develops skill in preparing multimedia lessons to teaching and learning Physics
- develops interest in knowing recent Research in Physics Education
- develops positive attitude towards the teaching and learning Physics
- appreciates the contribution of the Physics subject in day to day life

Unit -1: Planning For Instruction
Long-term plan, Mid-term plan, short-term plan- Identifying the need for instruction in Physics – Preparation of Lesson Plan for teaching Physics at higher secondary level.

Unit- 2: Media Selection
Media and its uses – Procedure for media selection - Factors in Media Selection - Instructional multimedia technology-Benefits of multimedia technology

Unit -3: ICT Based Teaching and Learning
Internet and its application in teaching and learning Physics - Teaching and Learning by Online Forum, Online Video Conference, Virtual Class – teleconferencing and EDUSAT in teaching Physics.

Unit -4: Evaluation of Teaching
Purpose of evaluating teaching – Sources for teacher evaluation-Self-evaluation, Evaluation of science teacher by peers, by students and by experts - Teacher Accountability - Suggestions for enhancing Teacher Accountability

Unit- 5: Diagnosing Difficulties in Learning Physics
Diagnosis – Principle of Diagnosis - Steps – Importance - Identification of Students' Difficu1ties in Learning Physics – Planning of Remedial Measures.

Unit- 6: Creativity in Physics
Meaning and Definitions – Characteristics of Creative Children-Identification of creative children in Physics - Nurturing and stimulation of creativity in Physics .

Unit- 7: Review
Meaning – Types - Need and Importance - Characteristics of a good Review in Physics Lessons

Unit- 8: Assignment
Aims of Assignments in Physics – Individual Assignments – Group Assignments – Home Assignments – Advantages and Disadvantages -Characteristics of a good Assignment - Teacher's role

Unit -9: Action Research
Meaning - Definitions of Action Research – Steps - Importance for quality improvement in teaching Physics - Difference between Action Research and Fundamental Research – Advantages of Action Research.

Unit -10: Research in Physics Education
Need for Research in Physics Education – Problems in Teaching- Learning Process in Physics – Outcomes of Research

For Fast Track Learners

Using Mobile Phone for Teaching of Physics-creating virtual class room for Physics-Identification of Physics related concepts in day to day life encounters.

Practical Works

- Preparation of Multimedia Instructional Materials on Physics Lessons.
- Creating Blogs and arranging Blog Discussion Group in the class room.
- Drafting recent reports on the research findings of the Physics Education
- Identifying any one of the problem during teaching practice and preparing Action Research report.
- Preparing assignments on the significance and limitations of various Social Networks
- Any five experiments in Physics.

Text Books

1. Saunders, A.N. (1955). Teaching of General Science in Tropical Secondary School, Printed in Great Britain by Butter and Taunen Limited, London.
2. Sharma, P.C. (2006). Modern Science Teaching, DhanpatRai Publications, New Delhi.
3. Pandey, (2003).Major Issues in Science Teaching, Sumit Publications, New Delhi.
4. Yadav, M.S. (2003). Teaching of Science, Anmol Publications. New Delhi.
5. Gupta, S.K. (1985). Teaching of Chemistry in Secondary Schools, Sterling Publication (Pvt.) Limited.

Supplementary Reading

1. Heiss, Obourn& Hoffman (1985). Modern Science in Secondary Schools, Sterling Publication (Pvt.) Limited.
2. Sharma, R.C. (1985). Modern Science Teaching, DhanpatRai and Sons

Course Outcomes

The student teacher should be able to

CO1:	acquire the basic knowledge about planning lesson and ICT based teaching of physics at higher secondary level.
CO2:	understand the media selection and creativity in physics
CO3:	apply the scientific knowledge to identify the teachers accountability and students difficulties in learning physics
CO4:	develop skills in reviewing lessons in physics
CO5:	develop interest in knowing more about the assignments in physics

Outcome Mapping

CO/ PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PS O1	PS O2	PS O3	PS O4	PS O5
CO1		2									2				
CO2					2									3	
CO3															
CO4						3									
CO5										2				2	

Learning Objectives (LO): The student-teacher
- acquires knowledge of the Planning for Instruction in the teaching Chemistry
- understands the factors behind Media Selection in teaching Chemistry and the purpose of Review and Assignments
- applies the knowledge in ICT Based Learning & Teaching in actual class room situation
- develops skill in preparing multimedia lessons to teaching and learning Chemistry
- develops interest in knowing recent Research in Chemistry Education
- develops /positive attitude towards the teaching and learning Chemistry
- appreciates the contribution of the Chemistrysubject in day to day life

Unit -1: Planning For Instruction
Long-term plan, Mid-term plan, short-term plan- Identifying the need for instruction in Chemistry – Preparation of Lesson Plan for teaching Chemistry at higher secondary level

Unit -2: Media Selection
 Media and its uses – Procedure for media selection – Factors in Media Selection – Instructional multimedia technology-Benefits of multimedia technology.
[
Unit -3: ICT Based Teaching and Learning
Internet and its application in teaching and learning Chemistry – Teaching and Learning by Online Forum, Online Video Conference, Virtual Class – teleconferencing and EDUSAT in teaching Chemistry.

Unit -4: Evaluation of Teaching
Purpose of evaluating teaching – Sources for teacher evaluation-Self-evaluation, Evaluation of science teacher by peers, by students and by experts – Teacher Accountability – Suggestions for enhancing Teacher Accountability.

Unit -5: Diagnosing Difficulties in Learning Chemistry
Diagnosis –Principle of Diagnosis-Steps – Importance – Identification of Students' Difficu1ties in Learning Chemistry – Planning of Remedial Measures.

Unit -6: Creativity in Chemistry
Meaning and Definitions – Characteristics of Creative Children-Identification of creative children in Chemistry – Nurturing and stimulation of creativity in Chemistry.

Unit -7: Review
Meaning – Types – Need and Importance – Characteristics of a good Review in Chemistry Lessons.

Unit -8: Assignment
Aims of Assignments in Chemistry – Individual Assignments – Group Assignments – Home Assignments – Advantages and Disadvantages –Characteristics of a good Assignment – Teacher's role

Unit -9: Action Research
Meaning – Definitions of Action Research – Steps – Importance for quality improvement in teaching Chemistry – Difference between Action Research and Fundamental Research – Advantages of Action Research.

Unit -10: Research in Chemistry Education
Need for Research in Chemistry Education – Problems in Teaching- Learning Process in Chemistry – Outcomes of Research

For Fast Track Learners

Correlation approach of teaching chemistry with day today life-Health-Based chemistry education-Chemistry on balanced diet-Awareness on various diseases caused by malnutrition-Chemistry education for sustainable physical health-Medicinal values of chemistry-Chemistry of natural resources and its safety measures

Practical Works
- Preparation of Multimedia Instructional Materials on Chemistry Lessons.
- Creating Blogs and arranging Blog Discussion Group in the class room.
- Drafting recent reports on the research findings of the Chemistry Education
- Identifying any one of the problem during teaching practice and preparing Action Research report.
- Preparing assignments on the significance and limitations of various Social Networks
- Any five experiments in Chemistry.

Text Books
1. Saunders, A.N. (1955). Teaching of General Science in Tropical Secondary School, Printed in Great Britain by Butter and Taunen Limited, London
2. Sharma, P.C. (2006). Modern Science Teaching, DhanpatRai Publications, New Delhi.
3. Pandey, (2003).Major Issues in Science Teaching, Sumit Publications, New Delhi.
4. Yadav, M.S. (2003). Teaching of Science, Anmol Publications. New Delhi.
5. Gupta, S.K. (1985). Teaching of Chemistry in Secondary Schools, Sterling Publication (Pvt.) Limited.
6. Heiss, Obourn& Hoffman (1985). Modern Science in Secondary Schools, Sterling Publication (Pvt.) Limited.
7. Sharma, R.C. (1985). Modern Science Teaching, DhanpatRai and Sons.
8. Edgar Dale, Audio-Visual Methods in Teaching, Revised Edition, Thy Dryden Press, Newyork.
9. Siddifit Siddiqi, (1985).Teaching of Science Today and Tomorrow, Doals House.
10. Patton, M.Q. (1980). Qualitative Evaluation Methods, Sage Publications, India.
11. UNESCO. (1979). The UNESCO Source Book for Science Teaching. UNESCO, Paris.

Supplementary Reading

1. PannerSelvam, A. (1976).Teaching of Chemistry (Tamil), Government of Tamil Nadu.
2. Nair, C.P.S. (1971). Teaching of Science in our Schools, Sulthan Chand & Co. (Pvt.) Limited.
3. Rao, C.S. (1968). Science Teacher's Handbook, American Peace Crops.
4. Kerr, S.T., (Ed.), Technology and the Future of Schooling, University of Chicago Press, U.S.A.
5. Newbury N.F., Teaching of Chemistry in Tropical Secondary Schools, Oxford University Press.

Course Outcomes

The student teacher should be able to

CO1: acquire the basic knowledge about planning lesson and ICT based teaching of Chemistry at higher secondary level.
CO2: understand the media selection and creativity in Chemistry
CO3: apply the scientific knowledge to identify the teachers accountability and students difficulties in learning Chemistry
CO4: develop skills in reviewing lessons in Chemistry
CO5: develop interest in knowing more about the assignments in Chemistry

Outcome Mapping

CO/ PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PS O1	PS O2	PS O3	PS O4	PS O5
CO1		2									2				
CO2					2									3	
CO3															
CO4						3									
CO5										2				2	

Learning Objectives (LO): The student teacher
- acquires thorough knowledge of topics in zoology taught in higher secondary schools and the latest development.
- understands the importance of zoology in the modern age and the need for the teaching of zoology in schools.
- understands the aims and values of teaching zoology
- understands the objectives of teaching zoology at various levels and especially at higher secondary level need and importance of zoology curriculum and its approaches.
- applies psychological basis of teaching zoology at higher secondary level.
- applies the principles of curriculum in the organization of content in zoology
- understands modern trends in the instructional methodology and dynamic methods of teaching zoology.
- develops skills in
  - teaching zoology at higher secondary level
  - preparing, and using the appropriate instructional materials in teaching zoology.
  - preparing zoology curriculum

Unit-1: Planning for Instruction
Identification and organisation of concepts for teaching Zoology- Instructional materials required for planning teaching Zoology-Preparation of Lesson plan for teaching Zoology at higher secondary level.

Unit-2: Media Selection
Media and its uses- Procedure for media selection-Factors in media selection

Unit-3:ICT Based Teaching and Learning
Internet and its applications in teaching and learning of zoology- Application of e-learning, teleconferencing and EDUSAT in teaching of zoology.

Unit-4: Evaluation of Teaching
Evaluation of science teacher by peers- Evaluation by students-Evaluation by experts.

Unit-5: Diagnosing Difficulties in Learning Zoology
Importance, purpose and process of diagnosing the difficulties of learning zoology-Ways of providing suitable measures.

Unit-6: Creativity in Learning Zoology
Meaning and definitions of creativity- Need of creativity for learning zoology-Qualities of highly creative children- How to faster creativity in children.

Unit-7: Review of Units in Zoology
Need and importance reviewing lesson in zoology- Characteristics of a good review-Different techniques of reviewing lesson.

Unit-8: Assignment
Type of assignment to be given- Importance of assignment in learning zoology-Characteristics of good assignment.

Unit-9: Action Research in Teaching Zoology

Meaning and definitions of action research-Importance of action research for the quality improvement in teaching-Objectives of action research-Steps in action research.

Unit-10: Research in Science Education

Need for research in science education- Recent trends in research in science education

For Fast Track Learners

Enhancement the Teaching and Learning Methods of Some Zoological Courses Invertebrate, Parasitology , Anatomy and Animal Physiology- Visual Representation of Lesson Content Structure

Practical works:
- Prepare a detailed report regarding the materials and media prepared and used by you for your teaching and learning process.
- Conduct a debate on a life science based issue and prepare a self evaluation report.
- Prepare a report on field trip organized by you for your students.
- Prepare a report on action research conducted by you to improve the quality of teaching and learning process.
- Prepare an e –Work book on any one of the unit in zoology at higher secondary level.

Text Books
1. Ameeta, P.,(2005). Methods of Teaching Biological Science. Hydrerabad: Neelkamal Publications Prt.Ltd.
2. Bhatt, B. D., Sharma S.R., (1996). Methods of Teaching Science. Delhi: Kanishka Publishing House.
3. Choudhary, S., (2004). Teaching of Biology. New Delhi: APH Publishing Corporation.
4. Cronbach, L. J. & Snow, R. E., (1977). Aptitude and Instructional Methods. New York: Irvington Publishers.
5. Das, R.C., (1985). Science Teaching in Schools. New Delhi: Sterling Publishers.
6. Deepak Dayal, Richa Bhatt and Biswajit Ray,(2007). Modern Methods of Teaching Biology. New Delhi: APH Publishing Corporation.
7. Krishanamacharyulu,V., (2011). Science Education. Hyderabad: Neelkamal Publications pvt.Ltd,.
8. Lakshmi Gadde, Bhuvaneswara, (2003). Methods of Teaching Life Sciences. New Delhi: Discovery publishers.
9. Malhotra,V., (2007). Encyclopaedia of Modern Methods of Teaching Science. New Delhi: Crescent Publishing Corporation.
10. Mujibul Hasan Siddiqui,(2007). Teaching of Science. New Delhi: APH Publishing Corporation.
11. Narendera Vaidya, (1999). Science Teaching for the 21st century. New Delhi: Deep&Deep Publication.
12. NCERT (2006). National Curriculum Framework for School Education 2005, New Delhi: NCERT Publications.
13. Rajammal,K.,(2009). Methods of Teaching Biological Science. Chennai: Santha Publication,

Supplementary Reading

1. Rajput, J. S. (ed.) (2002). Experiences in School Education. New Delhi: NCERT Publications.
2. Schmeck, R.R., (1998). Learning Strategies and Learning Styles. New York: Plenum Press.

3. Sharma,R.C.,(2002). Modern Science Teaching. New Delhi: Dhanpat Rai Publishing Company(P) Ltd.
4. Sood, J. K., (1985). Teaching Life Sciences. Delhi: Kohli Publications.
5. Taylor D. J. and others, (2004). Biological Science. London: Cambridge university press.

Course Outcomes

The student teacher should be able to

CO1: acquire the basic knowledge about planning lesson and ICT based teaching of Zoology at higher secondary level.
CO2: understand the media selection and creativity in Zoology
CO3: apply the scientific knowledge to identify the teachers accountability and students difficulties in learning Zoology
CO4: develop skills in reviewing lessons in Zoology
CO5: develop interest in knowing more about the assignments in Zoology

Outcome Mapping

CO/ PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PS O1	PS O2	PS O3	PS O4	PS O5
CO1		2									2				
CO2					2									3	
CO3															
CO4						3									
CO5										2					2

Learning Objectives (LO): The student teacher
1. acquires thorough knowledge of concepts, terms, and procedures in Botany taught in higher secondary schools and the latest development.
2. understands the
   - planning for instruction.
   - various aids to teaching Botany and application of ICT in teaching of Botany at various levels in higher secondary schools.
   - identification and diagnoses of difficulties in learning Botany.
3. develops skills in
   - preparing, and using the appropriate instructional materials in teaching Botany.
   - preparing and using different techniques of evaluation of pupils; progress.
   - identifying learning difficulties in learning Botany.
   - various activities pertaining to teaching and learning.
   - appreciates the contribution of the subjects to the teaching and learning.

Unit-1: Planning for Instruction
   Identification and organisation of concepts for teaching Botany- Instructional materials required for planning teaching Botany-Preparation of Lesson plan for teaching Botany at higher secondary level.

Unit-2: Media Selection
   Media and its uses- Procedure for media selection-Factors in media selection.

Unit-3:ICT Based Teaching and Learning
   Internet and its applications in teaching and learning of Botany- Application of e-learning, teleconferencing and EDUSAT in teaching of Botany.

Unit-4: Evaluation of Teaching
   Evaluation of science teacher by peers- Evaluation by students-Evaluation by experts.

Unit-5: Diagnosing Difficulties in Learning Botany
   Importance and purpose of diagnosis the difficulties of learning Botany-Ways providing suitable measures- Educational implications of improvisation of media.

Unit-6: Creativity in Learning Botany
   Meaning and Definitions of Creativity- Need of creativity for learning Botany-Qualities of highly creative children- How to faster creativity in children.

Unit-7: Review of Units in Botany
   Need and importance reviewing lesson in Botany- Characteristics of a good review-Different techniques of reviewing lesson.

Unit-8: Assignment
   Type of assignment to be given- Importance of assignment in learning Botany-Characteristics of good assignment.

Unit-9: Action Research in Teaching Botany
   Meaning and definitions of action research-Importance of action research for the quality improvement in teaching-Objectives of action research-Steps in action research.

Unit-10 Research in Science Education
   Need for research in science education- Recent trends in research in science education.

For Fast Track Learners

Fostering creativity among students – conducting action research in teaching Botany – Reviewing recent researches in science Education.

Practical works:
- Submit a report about the uses of internet in the field of Botany.
- Select any one topic from Higher secondary Botany syllabus – identify the learning difficulties and suggest suitable remediable measures.
- Prepare an instructional material for teaching botany.
- Submit an assignment on the different techniques of reviewing a lesson.
- Prepare and submit a lesson plan using power point presentation on any one topic at the higher secondary level.

Text Books
1. NarenderaVaidya,(1999), Science Teaching for the 21stcentury,Deep&Deep Publication, New Delhi.
2. Sharma,R.C.(2002), Modern Science Teaching, Dhanpat Rai Publishing Company(P) Ltd,New Delhi.
3. Yadav,M.S.(2003).Teaching of science teaching ,Anmol Publications, New Delhi.
4. Pandey,(2003).Major Issues in Science teaching, Sumit Publications, New Delhi.
5. Ameeta.P.(2005), Methods of Teaching Biological Science,New Delhi.
6. Venugopal.G and Nithyasri.N,(2005),Teaching of Biology,RamPublishers,Chennai.
7. Mujibul Hasan Siddiqui,(2007),Teaching of science, APH Publishing Corporation,New Delhi.

Supplementary Reading

1. Deepak Dayal,Richa Bhatt and Biswajit Ray,(2007), Modern Methods of Teaching Biology, APH Publishing Corporation, New Delhi.
2. Aggarwal.D.D.(2008).Modern Method of teaching Biology, Karanpaper backs, New Delhi.
3. Rajammal.K.(2009),Methods of Teaching Biological Science,Santha Publication.
4. Krishanamacharyulu.V.(2011),ScienceEducation,Neelkamal Publications pvt.Ltd, Hydrabad.

Course Outcomes

The student teacher should be able to

CO1:	acquire the basic knowledge about planning lesson and ICT based teaching of Botany at higher secondary level.
CO2:	understand the media selection and creativity in Botany
CO3:	apply the scientific knowledge to identify the teachers accountability and students difficulties in learning Botany
CO4:	develop skills in reviewing lessons in Botany
CO5:	develop interest in knowing more about the assignments in Botany

Outcome Mapping

CO/ PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PS O1	PS O2	PS O3	PS O4	PS O5
CO1		2									2				
CO2					2									3	
CO3															
CO4						3									
CO5										2					2

Learning Objectives (LO): The student teacher
- acquires Knowledge of the aims and objectives of computer science
- understands the nature and scope of computer science, the principles of curriculum construction and organization of subject matter, psychology of learning computer science
- understands the special qualities of a good computer science teacher, acquire those qualities and to evaluate himself or herself
- applies the knowledge in interaction of analysis in actual class room situation and teaching strategies
- develops skill in effective communication
- develops interest in knowing dynamic methods of teaching computer science.
- develops scientific attitude towards the teaching and learning.

Unit-1: Planning For Instruction

Long term plan, Medium term plan, short term plan-Key questions for lesson planning-Stages of planning- Identifying the need for instruction-Planning for Differentiated Instruction-Ways of differentiation Instruction –Universal design learning-Principles of Universal design learning –Steps for Creating visual media.

Unit-2: Media Selection

Factors in Media Selection 1.Physical attributes of media (Visuals, Printed materials, Sound, Motion, Colour, Real objects) 2. Learner characteristics Instructional setting and Categories of learning outcome, events of Instruction, task characteristics 3.Practical factors-Factors affecting media selection- Use of media in Education-Instructional multimedia technology-Benefits of multimedia technology(Learner, Instructor, Administrative) – Issues concerning multimedia technology

Unit-3: ICT Based Learning &Teaching

Teaching and Learning by Web Tools: Open Source Content – Wikipedia, Wiki Educator. Curriki, Blog Discussion Group, Online Forum, Online Video Conference, Social Networking – Orkut, Face Book, Twitter, Whatsapp – Instructional Use.

Unit-4: Evaluation Of Teaching

Purpose of evaluating teaching – Sources for teacher evaluation-Self-evaluation, Social, Politcal context-Teacher Accountablity- Modes of Accountablity, Legal/contractual, Moral, Social, Intellectual, professional.-Suggestions for enhancing Teacher Accountablity-Obstacles to Quality teacher evaluation.

Unit-5: Diagnostic Difficulties In Teaching

Diagnosis –Principle of Diagnosis-Steps – Importance – Identification of Students' Difficu1ties in Learning Computer science. Planning- Development-Remedial Instruction

Unit-6: Creativity In Learning

Creative Thinking in Computer science.Imagination- Significance-Sensation And Imagery-Types Of Imagination-Nature-Characteristics-Nurturing and Stimulation of Creativity-Conditions that enhances Creativity

Unit-7: Review

Meaning – Review Of Units – Need And Importance-Characteristics Of A Good Review Of A Computer science Lesson.– Types 1.Daily Lesson Review 2.Topical Review

3.Unit Plan Review 4.Co-Operative Review 5.Review By Application – Need And Importance-Characteristics Of A Good Review Of A Computer science Lesson.

Unit-8: Assignment

Aims-Types of assignments in Computer science (Preparatory, revision, study, remedial, Project, experience, problem, practice)– Individual assignments – Group assignments –Home assignments – Criteria of assignments-Procedure –significance-Teacher's role-Difficulties in the preparation-Advantages and Disadvantages.

Unit-9: Action Research

Meaning-Characteristics of Action Research-Difference between Action Research and Fundamental Research-Steps-Advantages-Illustration.

Unit-10: Research In Computer Science Education

Need For Research in Computer science Education – Problem in Teaching – Learning Process of Computer science – Outcomes of Research – Learning To Understand How Children Learn Computer science.

For Fast Track Learners

Improvising Social Media for Teaching and Learning- Developing simple Mobile Applications-proper usage of digital support system for Teaching and Learning.

Practical works:

- Preparation of Multimedia instructional materials on Computer science
- Creating Blogs by the student and arranging Blog Discussion Group in the class room.
- Drafting recent reports on the research findings of the Computer science Education
- Identifying any one of the problem during teaching practice and Preparing Action Research.
- Preparing assignments about the significance and limitations of various Social Networks

Text Books

1. Rao, P.V.S.,1981 Computer Programming, TMH, Delhi.
2. Roger Humt Hon Shelley,1975 Computers and Common Sense, Prentic Hall (India) Delhi.
3. Shied, Introduction to Computer Science, SCHAVM.
4. StanelyPogrow, Education in the Compute Age, Sage Publication, Delhi, 1993.
5. Steeven M. Rass, Basic Programmking for Education, Pentic Hall, New York, 1990.
6. Jared Keengve, Grace Onchwari,James.N.Oigara,(2014) , Promoting Active learning through Flipped Classroom model, US of America
7. Robert.A.Reiser&Robert.M.Gagne, (1983) Selecting Media for Instruction, New Jersey

Supplementary Reading

1. Lyacremor –Hayon (1993) TECAHER SELF- EVALUATION, Teacher's in their own mirrors, Kluwer Academic Publishers
2. Kenneth.D.Peterson, (2000) Teacher evaluation, Sage Publications, New Delhi
3. James .H.Stronge, (2006) Evaluating Teaching:A guide to current thinking and best Practice, Corwin Press, US of America.
4. Tracey.E.Hall, Anne Meyer, David.H.Rose, (2008) Universal design learning in the classroom, The Guilford Press, New York

Course Outcomes

The student teacher should be able to

CO1: acquire the basic knowledge about planning lesson and ICT based teaching of Computer Science at higher secondary level.
CO2: understand the media selection and creativity in Computer Science
CO3: apply the scientific knowledge to identify the teachers accountability and students difficulties in learning Computer Science
CO4: develop skills in reviewing lessons in Computer Science
CO5: develop interest in knowing more about the assignments in Computer Science

Outcome Mapping

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4	PSO5
CO1		2									2				
CO2					2									3	
CO3													2		
CO4						3						3			3
CO5										2					2

Learning Objectives (LO): The student teacher
- acquires the knowledge of the concepts, terms and curricular approaches related to teaching history.
- understands the various innovative methods and techniques in teaching of history.
- understands the significance of relevant media and ICT in teaching history.
- understands the needs of different learner group and foster historical ideas and current events.
- develops interest to know the achievement in history.
- develops healthy social attitude in practising the spirit of noble ideas.

Unit-1: Planning for instruction at Higher Secondary level
Need for planning – Principles of planning – Instructional materials for planning – Unit plan. Importance of lesson plan – Steps in a lesson plan – Model lesson plan.

Unit-2: Media Selection
Meaning and significance – Radio's school broadcast – Educational Television – Role of the teacher in T.V.

Unit-3: ICT based Teaching and Learning
Computer assisted instruction – Interact and its applications – working of internet – e-learning – World wide web – Teleconferencing – Satellite – EDUCSAT.

Unit-4: Evaluation of History Teaching
Evaluation in history – Concept of evaluation – Purpose of evaluation – Principles of good evaluation – Formative and summative evaluation – Advantages-Construction of achievement test at higher secondary level – Characteristics – Criteria of good question paper.

Unit-5: Diagnosing Learning difficulties in History
Identifying learning difficult learners – Factors hindrance to learning – Motivating the learner.

Unit-6: Creativity in Learning History
Identification – Need for identifying creative children – Educational programmes to foster creativity.

Unit-7: Utilizing current events and Contemporary Affairs
Importance of current affairs in history – Objectives of teaching current events – How to select current affairs for teaching of history – Techniques of teaching current affairs – Role of history teacher in imparting knowledge of current affairs.

Unit-8 Action Research
Meaning – Difference between formal research and action research – Different stages of action research – Determination of problem area – probable causes – Formulation of hypotheses – Testing hypotheses – Action programme – Analysis and interpretation.

Unit-9: Research in history
Need for research in history education – Recent trends.

Unit-10: Feature History Curriculum
Students expectations – Teacher expectations-Parents expectations-Society expectations-correlation between past and present.

For Fast Track Learners

History of archeology – keezhadi - History field of study – History television channel – History TV net work – Sex Education and History – icssr – online Courses in History Teaching – Mooc - Google - Wikipedia.

Practical works:
- Creative write up of two pages on a current historical problem.
- A project report about to visit any one of the place of historical importance .
- Prepare a chart showing the important battles in the Mughal Period.
- Compare any two civilizations flourished in Northern India.
- Write the important contributions of first five president in India.

Text Books
1. Busrston.W.H, Principles of history teaching, Methuen & Co. Ltd., London, 1963.
2. Chaudhary.K.P, The Effective Teaching of History, N.C.E.R.T., New Delhi.
3. Kochhar,S.K. Teaching of History, Sterling publishers private Limited, New Delhi, 2005.
4. Majumdar..C. Historiography in Modern India, Bombay, 1979.
5. Sheik Ali.B History its theory and method, the Macmillan company of India Limited, Madras 1978.

Supplementary Reading
1. Terry Haydn et.al Learning to teach history in the secondary school,
2. Methuen Co-Ltd, London, 2003.
3. Biranchi Narayan Dash Teaching of History, Neel Kamal Publications pvt. Ltd. New Delhi, 2006.

Course Outcome
The student teacher should be able to

CO1: prepare a lesson plan by choosing a topic in history
CO2: apply the latest technologies in history teaching
CO3: follow the principles of evaluation in history
CO4: diagnose the learning difficulties in history
CO5: identify the creative children in learning history

Outcome Mapping

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4	PSO5
CO1		3													
CO2									3			2			2
CO3						3									
CO4		3		1									2		
CO5											2				1

Learning Objectives(LO): The student teacher
- acquires the knowledge of Lesson plan, evaluation and learning experiences.
- develops understanding of the construction of achievement test in Economics.
- applies the principles in teaching Economics.
- develops the skillinpreparing good lesion plan

Unit – 1: Lesson Plan

The nature of Lesson plan – Meaning – Important – Functions - Four types of Planning – Advantages – Preparation of good Lesson Plan – Unit Plan.

Unit –2: Organizing Learning Experiences

Learning experience – Types – Levels, Procedures – Topics in Economics – Developing suitable learning experiences for different topics of Economics – Organizing suitable learning for different topics.

Unit –3: Evaluation in Economics

Evaluation in Economics – Purpose – Aspects – Objective based evaluation – Preparation of Blue print – Different types of Evaluation – Diagnostic and remedial methods – Examination reforms – Internal and External exam – Theory and practical areas in evaluation.

Unit –4: Construction of Tests

Meaning – Concept - Different types of questions – Objective type, Short answer, Essay type – Its significance- Merits and Demerits.

Characteristics of good test – Different types of test – Diagnostic, Prognostic and achievement test – Construction and Standardization of achievement test – Significance of test.

Unit –5: Specific Approaches of Economics

Learning centered approach – Problem solving approach – Team teaching approach – Instructional approaches- Experimental approach – Integral approaches- Significance of specific approaches.

Unit –6: Reviewing in Economics

Reviewing in Economics – Principles – Characteristics – Methods – Techniques of using different types of Reviewing.

Unit –7: Assignment in Economics

Assignment in Economics – Principles – Importance – Types – Techniques of using – Individual – Group – Project assignment suitable for learning different Economic concepts.

Unit –8: Content and Pedagogical analysis

Aspects of Pedagogical analysis – Utility of Pedagogical analysis for Economics teacher – Content analysis of Higher Secondary Economics syllabus.

Unit –9: Teaching and Learning resources

Text books – Periodicals – Journals – Reference book materials – Community resources – Technical documents – Surveys – Current affairs – Guest speakers – Community field trip – Audio visual materials – Economics library - club, museum and Economics Class room.

Unit –10: Text Book analysis

Characteristics of good text book – Economics evaluation of different types of text books – CBSE and State board.

For Fast Track Learners

Economic development- Demonetization- Impact of Demonetization- Developed countries and Developing Countries

Practical Works:
- Preparation of unit plans in economics
- Visit different types of banks, super market, warehouse and industries
- Collection of year book, newspapers, magazines and articles related to economics.
- Preparation of 5 min power point presentation not less than 10 slides, with photocopy of the slides.
- Present a paper on any unit solely with the use of internet, with details of the websites & URL's visited.

Text Books
1. J.C Aggarwal, (2011), Teaching of Economics (A practical approach), 2nd Edison vitas publishing house.
2. Amita Yadav, (1995), teaching of economics first edision, anmol publication pct ltd, New Delhi.
3. Rudramamba et al., (2010), methods of teaching economics, discovery publishing house, New Delhi.
4. Tonne, Popham and freeman (1995), methods of teaching business subjects, Mcgraw Hill.
5. Kochar, S.K., The teaching of social studies sterling publishers pvt. Ltd., New Delhi.

Supplementary Reading

1. Ebel and L.Robert. (1965), Measuring Educational Achievement, prentice hall international. Inc, USA.
2. Binning, A.C. and D.A. Binning, Teaching the Social studies in Secondary School, Mcgraw hill. New York.
3. Keith Lumsden, (1967), New Developments in the teaching of economics, prentice hall the Englewood, New Jersey.

Course Outcomes
The student teacher should be able to

CO1: prepare lesson plan for Economics subjects
CO2: Construct different types of questions
CO3: explain different approaches of Economics
CO4: analyse the teaching learning resources of economics
CO5: analyse the text book prescribed for XIth and XIIth of the CBSE and

Outcome Mapping

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PS O1	PS O2	PS O3	PS O4	PS O5	PS O6
CO1	2													2		
CO2		3												2		
CO3			3							2		2				
CO4				2												
CO5											2				2	

Learning Objectives (LO): The Student teacher
- acquires knowledge of the principles of content and conceptual analysis.
- understands the various aspects of content analysis.
- applies the knowledge in analyzing the commerce and accountancy content in pedagogical terms.
- develops skill in construction and preparation of lesson plans, question papers and teaching aids.
- develops interest in analyzing the various commerce course contents in pedagogical terms.
- develops a desirable positive attitude towards teaching commerce.

Unit -1: Lesson Planning
Importance of planning- year plan, unit plan, preparation of lesson plan- principles involved- need and importance- significance of lesson plan for commerce and accountancy at higher secondary level- demonstration and criticism classes.

Unit -2: Organizing - Learning Experience
Learning experiences- definition – concept- types of learning experiences to different branches of commerce- learning experience in commerce and accountancy- a model of experience in teaching one unit in commerce. Coneof experiences- different strata- use of each layer to the commerce teaching with illustration- significance.

Unit -3: Evaluation in Commerce
Evaluation in the teaching of commerce- modern concept- significance- need- Objective Based Evaluation (OBE)- Formative evaluation, summative evaluation significance and purpose of evaluation- its role teaching- learning- process. diagnostic, prognostic and achievement test. Identifying learning difficulties in commerce – remedial measures.

Unit -4: Construction of Test
Characteristics of a good test- meaning- concept - construction and standardization of an achievement test- test items- importance and its significance. Blue print format preparation construction of different types of question – objective type, short answer type, essay type- its significance merits and demerits.

Unit -5: Specific Approaches of Book- Keeping
Principles of book- keeping- approaches of teaching book- keeping- Journal approach- ledger approach- cash book approaches- balance sheet approach- complete cycle approach- equation approaches- single entry approach.

Unit -6: Review in Commerce
Review of units in commerce- need and importance of reviewing lesson- characteristics of good review- different techniques of reviewing a lesson – different types review in commerce.

Unit -7: Assignment in Commerce
Assignment – types – importance- characteristics of a good assignment – types of assignment with illustrations in commerce.

Unit -8: Content and Pedagogical Analysis
Aspects of pedagogical analysis- utility of pedagogical analysis for commerce teachers- content analysis of higher secondary commerce syllabus.

Unit -9: Teaching- Learning Resources

Utilizing community resources- meaning, types and their uses in the teaching of commerce establishing link between school and community field trip- work experience- guest speakers- commerce club- developing commerce interest and attitude- related activities.

Unit -10: Text- Book Analysis

Characteristics of good commerce and accountancy text book- detailed analysis of Tamil Nadu higher secondary commerce and accountancy text book of regular and vocational stream- CBSE commerce text books.

For Fast Track Learners

Currency- Economic development and currency – Demonetization - Impact of Demonetization - Recent Demonetization in India

Practical Works:
- Export – Import procedure manuals
- Tax Procedure documents
- Company documents
- Visit to small scale industries and co- operative institutions
- Organize and celebrate consumer week activities in your locality

Text Books
1. Teaching of commerce- J.C..Aggarwal.
2. Teaching of commerce- Rainu Gupta- Shipra publications- shakrpur- New Delhi.
3. Kochhar, S.K., Methods and Techniques of teaching, Sterling Publishers, New Delhi, 1992.
4. Musseeman, Vernon A. and et al., Method of teacher accountancy, McGraw Hill Inc. USA, 1979
5. Sharma, R.A., technology of teaching, international publishing house ,
6. Meerut ,India, 1988.
7. Jangira and et al. Core Learning Skills, The Micro Teaching Approach

Supplementary Reading
1. NCERT, New Delhi, 1982.
2. Khan, M.S., Commerce Education, Sterling Publication Ltd. 1992.
3. Pia Nazareth, M., Education – Goals, Aims and objectives, Vikas Publishing House Pvt., Ltd., 1984.

Course Outcomes

The student teacher should be able to
CO1:   prepare lesson plan for Commerce subjects
CO2:   Construct different types of questions
CO3:   explain different approaches of Commerce
CO4:   analyse the teaching learning resources of Commerce
CO5:   analyse the text book prescribed for XIth and XIIth of the CBSE and

Outcome Mapping

CO/ PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PS O1	PS O2	PS O3	PS O4	PS O5
CO1	2													2	
CO2		3												2	
CO3			3							2		2			
CO4				2											
CO5											2				2

நோக்கங்கள்:
1. மாணவர்கள் தமிழ் மொழியின் ஒலிஅமைப்புமுறையைஅறிதல்.
2. மாணவர்கள் தமிழ் கற்பித்தலில் புதுமைகள் மற்றும் இலக்கியத் திறனாய்வுகுறித்துஅறிதல்.
3. மாணவர்கள்   சிறுகதை,புதினம்   போன்ற   இலக்கியவகைகளின் தோற்றம்,வளர்ச்சியைபுரிந்துகொள்ளுதல்.
4. இசைத் தமிழ் மற்றும் கல்வியின் தேசிய இலக்குகள் மீதுவிருப்பார்வம் வளர்த்தல்.
5. கற்பித்தலுக்குபல் ஊடகம் மற்றும் கணிப்பொறிசாதனங்களைபயன்படுத்தும் திறன் வளர்த்தல்.

அலகு-1

மனிதனின்   பேச்சுறுப்புகள் - ஒலிபிறக்கும்   முறை   -   உயிரொலி,மெய்யொலிபிறப்பு– உயிரொலிகளின் வகைப்பாடு–ஒலியன்கள் - பகுத்தல் - ஒலிகளின் சிறப்புப் பிரிவுகள் - அடிப்படை இலக்கணம் வாக்கியமாற்றம்.

அலகு-2

கேட்டல் திறன் - வரையறு - கேட்டலின் வழிக்கற்றல் - கேட்டல் பழக்கத் திறனைவளர்த்தல் - அனைத்துத் திறன்களுக்கும் அடிப்படைகேட்டலேஎன்பதைஅறிநுவுதல் - வானொலிகேட்டல் - சான்றோர் சொற்பொழிவுகள் கேட்டல் இணையதளவளங்களை–பயன்படுத்திகேட்டல் திறனைவளர்த்தல்.

அலகு-3

தமிழ் கற்பித்தலில் புதுமைப் போக்குகள் - தனியாள் வேறுபாட்டினைஅறிந்துகற்பித்தல் - திட்டமிட்டுகற்பித்தல் - மேற்பார்வைக் கற்பித்தல் - வகுப்பறைகற்பித்தல்.

அலகு-4

இலக்கியத் திறனாய்வு–அடிப்படைகள் - திறனாய்வின் தேவைகள் - ஆசிரியருக்குதிறனாய்வின் தேவை   வகைகள்   படைப்புவழித்   திறனாய்வு.   மரபுவழித்   திறனாய்வு,முருகியல்   முறைத் திறனாய்வுவிளக்கமுறைத்   திறனாய்வு,மதிப்பீட்டுமுறைத்   திறனாய்வு,வரலாற்றுமுறைத் திறனாய்வுஒப்பீட்டுமுறைத் திறனாய்வு,பாராட்டுமுறைத் திறனாய்வு.

அலகு-5

தேசிய இலக்குகளுக்கும்,கல்வியின் நோக்கங்களுக்குமுள்ளதொடர்பினைக் காணல் - கலைத் திட்டத்தில் தாய்மொழிபெறுமிடம் - தேசியக் கல்விக் கொள்கையில் கலைக் கல்வி–கலைத்திட்டக் கோட்பாடுகள் - கல்வியின் தேசியக் குறிக்கோளுக்கும் பள்ளிக் கலைத் திட்டத்திற்குமுள்ளதொடர்பு.

அலகு-6

பேச்சுத் தமிழ் - பேச்சுப் பிழை–தவறாகஒலித்தல் - திருத்தமானசொல் - அறியாமை–பொருள் வேறுபாடுஅறியாமை–சந்திப்பிழை,மயங்கொலிப்   பிழை–எழுத்துப்   பிழை–ஒருமைபன்மையயக்கம்   - நிறுத்தற் குறிகளின் பயன்பாடுகள் - வல்லினம் மிகுமிடம்,மிகா இடம்.

அலகு-7

இசைத்தமிழ் - இசையும் தமிழும் - மொழிக் கல்வியில் இசைபெறுமிடம் - தொல்காப்பியத்தில் காணலாகும் இசைத் தமிழ்க் கூறுகள் - பக்திப் பாடல்களில் இசை–நாட்டுப்புறப் பாடல்களில் இசை– தற்காலகவிதைவளர்ச்சிக்கு இசையின் பங்களிப்பு.

அலகு-8

சிறுகதை–தோற்றம்,வரையறை,முக்கியத்துவம்   -   வளர்ச்சி,புதுமைப்பித்தன்,லட்சுமி,மீராமைதீன் மற்றும் பலஎழுத்தாளர்கள்,தற்காலசிறுகதைகளின் நோக்கும் போக்கும்.

அலகு-9

புதினம் - வரையறு–தோற்றம் - வளர்ச்சி - இன்றையநிலை–புதினங்களின் பாடுபொருள் - கல்கி,பொன்னீலன்,நீலம்   பத்மநாபன்,சுந்தரராமசாமிமற்றும்   பலஎழுத்தாளர்கள்-கொள்கைகள் தாங்கியபுதினங்கள்.

அலகு-10

கணிப்பொறியும் தமிழும் - பல்லூடகமும் தமிழ் கற்பித்தலும்,தமிழ் ஆட்சிமொழியாகுவதில் உள்ளசிக்கல்கள்   -   நன்மைகள்   -   சிக்கல்   நீக்கும்   வழிகள்   -   பைந்தமிழ் பயிற்றலுக்குபல்லூடகபங்களிப்புகள்.

பத்திரிக்கைகளுக்குசெய்திளமுதிஅனுப்பும் முறைகள்,சமூகத் தேவைகளுக்குகுரல் கொடுப்பதில் ஆசிரியர்களின் பங்கு. ஆய்விதழ்களில் ஆய்வுக் கட்டுரைகள் சமர்ப்பித்துவெளியிடும் பயிற்சிஅளித்தல்.

செய்முறைப் பயிற்சி:
1. திறனாய்வுக் கட்டுரைதயாரித்தல்.
2. கையெழுத்து இதழ் தயாரித்தல்.

கற்றல் வெளிப்பாடுகள்
இப்பாடத்தைபயிலுவதன் மூலம் மாணவஆசிரியருக்கு

❖ தமிழ் மொழியின் மொழியியல் அடிப்படைகளைஅறிந்துக்கொள்ளமுடிகின்றது.

❖ தமிழ் கற்பித்தலில் புதுமைகளையும், இலக்கியத் திறனாய்வினையும்
நன்குபுரிந்துகொள்ளமுடிகின்றது.

❖ சிறுகதைமற்றும் புதின இலக்கியத்தின் தோற்றம்,வளர்ச்சிகுறித்துவிருப்பார்வம்
வளர்க்கப்படுகிறது.

❖ பல் ஊடகம்,கணிப்பொறிகளைப் பயன்படுத்திக் கற்பித்தலில்
நேர்மறையானவிருப்பார்வத்தைவளர்த்துக் கொள்ளமுடிகின்றது.

பார்வை நூல்கள்:
❖ விஜயலெட்சுமி, 2008,கற்பித்தலில் சிக்கல்கள் - தீர்வுகள்,சாந்தாபதிப்பகம்,சென்னை.
❖ கணபதி, வி. 2005,நற்றமிழ் கற்பிக்கும் முறைகள் பகுதி-ஐஐஐஇ சாந்தாப்ளிஷர்ஸ்,சென்னை.
❖ ஞானமூர்த்தி,தா.ஏ, 2002, இலக்கியத் திறனாய்வியல்,யாழ் வெளியீடு,சென்னை.
❖ துரைக்கண்ணுமுதலியார்,என், 1962,கல்விக்கலைஅமுதநிலையம் பிரைவேட் லிமிடெட்,சென்னை.
❖

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	√													
CO2							3					2		2	
CO3		3									3		3		3
CO4	2									2					
CO5						2			3					3	

Learning Objectives (LO): The student teacher
- acquires the knowledge of the concepts, terms and procedures in the pedagogy of English
- understands the concepts, terms and procedure in the innovations, trends, and approaches of teaching English
- uses the knowledge in actual classroom situations
- develops interest in various activities pertaining to teaching and learning of English
- develops interest in knowing recent developments in the innovations, trends, and approaches of teaching English
- develops positive attitude towards teaching and learning of English
- appreciates the contribution of English language to the process of teaching and learning

Unit-1: Development of Receptive Skills
Listening skill - - types of listening - strategies to improve listening skills - Reading skill - types - methods of reading - strategies to improve reading skill.

Unit-2 : Development of Productive Skills
Speaking skill - types of drills - strategies to improve speaking skill- writing skill - mechanics - factors - causes for bad handwriting -qualities of good handwriting's

Unit-1II: Phonetics
Speech organs and their role - vowels - consonants - semi vowels - diphthongs - stress - word stress - sentence stress -Rhythm - intonation - types.

Unit-4: Fluency
Use of conventional formulae - greeting - apology - invitation - refusal - thanking - Various concepts and ways in which they are expressed - suggestion- prohibition - permission - probability - concession.

Unit-5: Lexis
Word formation - affixation - conversion - compounding - clipping - portmanteau - onomatopeia - patterns of spelling - sentence connectors - devices for cohesion and coherence - phrasal verbs - prepositional phrases.

Unit-6: Reference and Study Skills
SQ3R method of reading - Study skills - Note making - Note - making -summarizing - paraphrasing - Reference Skills - Library - dictionary - thesaurus -encyclopedia - bibliography.

Unit-7: Co-Curricular Activities
Language games - organization of debates - extempore speech - elocutions - dramatization - forms of dramatic representation - class - school magazine.

Unit-8 : Review and Translation
Need and importance of reviewing - steps involved - advantages of reviewing - translation - principles - procedure - advantages.

Unit-9 : ICT in ELT
Use of internet - web based learning - Internet and its applications - blog -podcasts - e-mail - e-learning - m-learning - teleconferencing - EDUSAT - CAI -CAELL - CALL.

Unit-10 : Recent Research in Language Education

Research in ELT - improving professional competency in ELT - role of EFLU -NCERT - RIE and The British Council - recent trends - current issues in ELT.

For Fast Track Learners

Interactional features – Reception based theories - Production based theories – Components of successful interaction - Physical setting – Instructor attitude – Teacher communication strategies – Verbal – Explanation – Exemplification – Repetition – Contrast – Substitution – Clue giving – Non – Verbal communication – personal appearance – posture – Gesture – Facial expression – Eye contact – Space distancing – Continues of class room interaction.

Practical Work
1) Prepare a labeled diagram of speech organs.
2) Prepare a vowels and consonants charts.
3) Prepare a diphthongs chart with illustrations
4) Prepare of an album for stress and intonation
5) Transcribe any four paragraphs into phonetic script.

Text Books
1) Ambedkar, V (2011) Teaching of English in Indian Context. Orathanadu: Annaveera Publishers
2) Anne, V.K., 2001. Methods of Teaching English. Hyderabad: New Era Publications.
3) Baruah, T.C., 2006. The English Teachers Handbook. New Delhi: Sterling Publishers.
4) Close, R.A., 1999, English as a Foreign Language. London: Longman.
5) Dash, B.N., 2007. Teaching of English .. New Delhi: Dominant Publishers
6) Halliday, M .A.K., 1998. Language as a Social Semiotic. Lc no on: Arnold Publications.
7) Jack, Richards, 2012. Approaches and Methods in Language Tear-nig. London: Cambridge
8) Jindal, D.V., 2008. An Introduction to Linguistics. New Delhi: Pre   ;ce Hall.
9) Krishna Babu, S., et.al. 2009. Reading Disabilities. New Delhi: Soi. 'U.
10) Kohli, A.L(2006) Techniques of Teaching English.   New Delhi:Uhanapat Rai Publications.

Supplementary Reading

1) Kishnaswamy, N., 2005. Teaching of English Grammar. Chennai: T.R.Publications.
2) Mowla, Shaikh, 2006. Techniques of Teaching English.Hyderabad: Neelkamal.
3) Pahuja, N.P., 2009. Teaching of English. New Delhi: Anmol Publications.
4) Swan, Michael, 2002. Practical English Usage. Oxford: OUP.
5) Venkateswaran, S., 2011. Principle of Teaching English. New Delhi: Vikas Publishing House.
6) Vallabhi, J.E., 2012. Teaching of English II: Principles and Practices. Hyderabad: Neekamal.

Course Outcomes

The student teacher should be able to

CO1:	acquire the knowledge related to development of receptive and productive skills.
CO2:	understand the various aspects related to phonetics & fluency
CO3:	comprehend the use of ICT in ELT
CO4:	equip with the recent research in language education
CO5:	develop the skill of writing a review and translation

Outcome Mapping

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2		3	2									2	
CO2												2		3	1
CO3				3					3					3	
CO4											3				
CO5				3									2		

Learning Objectives (LO): The Student teacher
- acquires knowledge about the gifted students and programmes for backward learners in mathematics
- understands the technology of teaching mathematics and the use of audio-visual aids, the special qualities and professional growth of mathematics teacher
- applies knowledge and understanding in organizing different co-curricular activities in mathematics
- develops the skills in construction of an achievement test
- develops interest in planning lessons and presenting them effectively
- develops a positive attitude towards recent developments in mathematics education

Unit- 1 Planning for Instruction
Stating Instructional Objectives, Identifying Learning Experiences, Teaching Aids; Lesson Plans-Preparation of Lesson Plans

Unit -2: Instructional Materials and Media
Need and importance-Classification of audio-visual aids (Projected and Non-Projected)-and their uses. Radio: Educational Broadcasts and Television: telecast and video lessons – Power Point – Use of internet in teaching

Unit -3: Learning Resources
Mathematics textbook – Characteristics of a good Mathematics textbook- Use of ICT experience in learning Mathematics.

Unit -4: Activities of Mathematics
Objectives, Organizationand activities of Mathematics Club, Mathematics Exhibitions and Fairs, Fieldtrips and Excursions, Mathematics Quiz, Recreational Activities—Games, Puzzles and Riddles in Mathematics.

Unit -5: Mathematics Laboratory and Organization
Importance of Mathematics Laboratory- Planning of Mathematics Laboratory – Components of Mathematics Laboratory-Individual Work and Group Work.

Unit -6: Evaluation of Mathematics
Tests And Its Types-Achievement Tests–Qualities Of A Good Test- -Principles Of Test Construction-Blue Print And Question Paper-Item Analysis-Standardizing a Test-Elementary Statistics-Measures Of Central Tendency: Mean, Median And Mode–Measures Of Variability-Mean, Standard And Quartile Deviation, Correlation Co-Efficient, Rank Order And Product Moment Correlation-Graphical Representation Of Data: Bar And Pie Diagrams, Histogram, Frequency Polygon-Cumulative Frequency Curve, Ogive, Percentile Ranks, Normal Probability Curve, Kurtosis, Skewness.

Unit -7: Diagnostic Testing &Remedial Teaching
Diagnosis –Principle of Diagnosis-Steps – Importance – Identification of Students' Difficu1ties in Learning Mathematics. Planning- Development-Remedial Instruction

Unit -8: Professional Development of Mathematics Teachers
Characteristics of Mathematics Teacher-Teacher Evaluation – Students, Peer and Authority. Types of In-service Programme for Mathematics Teachers; Role of Mathematics Teachers Association; Journals and Other Resource Materials in Mathematics Education; Professional Growth—Participation in Conferences/Seminars/Workshops.

Unit -9: Teaching Gifted and Backward Learners in Mathematics

Individual Differences in Mathematics – Causes for Slow Learning in Mathematics and Remedial Measures for the Backward – Identification of the Gifted – Enrichment Programmes for The Gifted children.

Unit -10: Recent Developments in Mathematics Education

Flipped Learning-Spaced Learning in Mathematics, Gamification-Team-Based Learning –Jigsaw technique- Blended learning

For Fast Track Learners

Best Set Up Coaching – Proper Time Management – Exercises the Advanced Mathematics Problem Solving – Retain the Solved and Un solved Problem steps - Keyed Up and Enthused – Reside to be Calm – Common Admission Test (CAT).

Practical Works:

- Organizations of Mathematics Quiz in the classroom
- Observing Mathematics Laboratory in the schools and drafting a plan for Mathematics Laboratory
- Preparation of Slides, Transparencies and A-v aids for some of the topics in mathematics
- Practicing Recreational Activities like Games, Puzzles and Riddles in Mathematics.
- Preparing a report on the places having significance in mathematics for Field trip.

Text Books

1. Ball, W.N.R., (1893)A Short History of Mathematics, Mac.Milan, New York
2. Baur, George, R.R. Geeorge, *Linda Olsen(*1976)*Helping Children Learning Mathematics,* Cunnings Publishing Company, Inc.
3. Bell, E.T.,(1952) *Mathematics*, Queen and Servant of Sciences, McGraw Hill, New York.
4. Sudhir Kumar, (1993), *The Teching of Mathematics, Anmol Publications,* , New Delhi

Supplementary Reading

1. Sidhu, Kulbra,(1987) *The Teching of Mathematics*, Sterling Publishers, New Delhi.
2.Jared Keengve, Grace Onchwari,James.N.Oigara,(2014) , Promoting Active learning through Flipped Classroom model, US of America.

Course Outcomes

The student teacher should be able to

CO1:   acquire the basic knowledge about the learning resources in Mathematics at Higher secondary level .

CO2:   understand the preparation of lesson plan and the classification of audio visual aids

CO3:   apply the scientific knowledge to identify the students difficulties in learning Mathematics

CO4:   develop skills in constructing an achievement test and analyzing the marks obtained by the students

CO5:   develop the curiosity in knowing about the in service programme for teachers.

Outcome Mapping

CO/ PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PS O1	PS O2	PS O3	PS O4	PS O5
CO1		3									3				
CO2				3								2			2
CO3					2								1		
CO4		2												3	
CO5										2				2	

Learning Objective (LO): The Student teacher
- acquires knowledge of the instructional materials and media, Enrichment program for gifted and Programs for backward learners in Physical science
- understands the technology of teaching Physical science and the use of audio-visual aids, the special qualities and professional growth of Physical science teacher
- applies knowledge and understanding in organizing different co-curricular activities in Physical science
- develops the skills in skills in construction of an achievement test
- develops interest in planning lessons and presenting them effectively
- develops positive attitude in the recent developments in Physical science education

Unit -1: Planning For Instruction

Stating Instructional Objectives, Identifying Learning Experiences, Appropriate Strategies, Teaching Aids; Lesson Plan-Preparation of Lesson Plan

Unit -2: Instructional Materials and Media

Need and importance-Classification of audio-visual aids (Projected and Non-Projected)-and their uses. Radio: Educational Broadcasts and Television: telecast and video lessons – Power Point – Use of internet in teaching

Unit -3: Learning Resources

Physical science textbook – Characteristics of a good Physical science textbook – Using community resources for Physical science learning-Use of ICT experience in learning Physical science.

Unit -4: Co-curricular Activities in Physical Science

Objectives, organization and activities of science club – Science Exhibitions and Science Fairs – Fieldtrips and Excursions. Conducting Physical science Olympiads, Physical science Quiz-Recreational Activities—Games, Puzzles and Riddles in Physical science.

Unit -5: Physical Science Laboratory and Organization

Planning of Science Laboratory – Structure and Design – Location and Accommodation Amenities – Ventilation, Lighting, Water Supply, Fuel Etc. – Preparation of Indents. B) Organization of Laboratory Work, Individual Work and Group Work. C) Discipline in the laboratory – Rules for pupils and teacher – Supervision and Guidance. D) Accidents in the laboratory – First Aids.

Unit-6: Evaluation in Physical Science

Test and its types – Achievement Test – Characteristics of a good Achievement Test-steps in the construction of an achievement test – Question paper setting – Scoring key and marking scheme – Question wise analysis – Elementary Statistics – Measures of central tendency: Mean, Median and Mode–Measures of Variability-Mean, Standard and Quartile Deviation, Correlation Co-Efficient, Rank Order and Product Moment Correlation-Graphical Representation of Data: Bar And Pie Diagrams, Histogram, Frequency Polygon – Cumulative Frequency Curve, Ogive, Percentile Ranks, Normal Probability Curve, Kurtosis, Skewness.

Unit -7: Diagnostic Testing & Remedial Teaching

Diagnostic test – Principle of Diagnosis – Importance – Identification of Students' Difficulties in Learning Physical Science – Planning Remedial Instruction.

Unit -8: Professional Development of Physical Science Teacher

Characteristics of Science Teacher – Competency and Commitment of Science Teacher – Teacher Evaluation by Students, Peer and Authority

Need and importance of In-service programme for Physical science Teachers-Physical Science Teachers Association-Professional Growth: Participation in Conferences/Seminars/Workshops.

Unit -9: Teaching Gifted and Backward Learners in Physical Science

Individual differences in physical science – Causes for slow learning in Physical science and Remedial Measures for the Backward – Identification of the Gifted and Enrichment Programmes for the Gifted.

Unit -10: Recent Developments in Physical Science Education

Flipped Learning and Spaced Learning in Physical Science, Team-Based Learning, Block teaching, Jigsaw technique, Virtual Classroom, Blended learning and Hybrid Learning in Physical science.

For Fast Track Learners

Technology in Teaching of Physical science-Flipped Classroom- IMPACT

Practical Works

- Organizations of Physical Science Quiz in the classroom
- Observing Physical Science Laboratory in the schools and drafting a plan for Physical science Laboratory
- Preparation of Slides, Transparencies and A-V aids for some of the topics in physical science
- Practicing Recreational Activities like Games, Puzzles and Riddles in Physical science.
- Preparing a report on the places having significance in physical science for Field trip.
- Experiments in Physics and Chemistry at secondary level.

Text Books

1. Boulind, H.E., (1972) The Teaching of Physics in Tropical Secondary School, Oxford University, London.
2. Dale E.D.,(1970) Audio Visual Methods Teching, Dryden Press, New York.
3. of Science in Our School,Chand& Co. P. Ltd., New Delhi.
4. Newbur, N.F.,(1983) Teaching of Physical science in Tropical Secondary Schools, Oxford Universtiy Press, London.
5. Sharma, R.C., (1976) Modern Science Teaching, DhanpetRai& Sons, Delhi.
6. Saunders, A.N. (1955). Teaching of General Science in Tropical Secondary School, Printed in Great Britain by Butter and Taunen Limited, London
7. Sharma, P.C. (2006). Modern Science Teaching, DhanpatRai Publications, New Delhi.
8. Pandey, (2003).Major Issues in Science Teaching, Sumit Publications, New Delhi.
9. Yadav, M.S. (2003). Teaching of Science, Anmol Publications. New Delhi.
10. Gupta, S.K. (1985). Teaching of Chemistry in Secondary Schools, Sterling Publication (Pvt.) Limited.
11. Heiss, Obourn& Hoffman (1985). Modern Science in Secondary Schools, Sterling Publication (Pvt.) Limited.
12. Edgar Dale, Audio-Visual Methods in Teaching, Revised Edition, Thy Dryden Press, New 141ork.

Supplementary Reading

1. PannerSelvam, A. (1976).Teaching of Chemistry (Tamil), Government of Tamil Nadu.
2. Nair, C.P.S. (1971). Teaching of Science in our Schools, Sulthan Chand & Co. (Pvt.) Limited.
3. Joseph, (1966).The Teaching of Science, Harvard University Press.
4. Newbury N.F., Teaching of Chemistry in Tropical Secondary Schools, Oxford University Press.
5. Thurber, Walter, A., and Collettee, Alfred, T. (1964).Teaching Science in Today's Secondary School, Prentice Hall of India Pvt. Ltd.

Course Outcomes

The student teacher should be able to

CO1: acquire the basic knowledge about the learning resources in physical science at High School level.
CO2: understand the preparation of lesson plan and the classification of audio-visual aids
CO3: apply the scientific knowledge to identify the student's difficulties in learning physical sciences
CO4: develop skills in constructing an achievement test and analyzing the marks obtained by the students
CO5: develop the curiosity in knowing about in service programme for teachers.

Outcome Mapping

CO/ PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PS O1	PS O2	PS O3	PS O4	PS O5
CO1		2									2				
CO2					2									3	
CO3												3			3
CO4						3							3		
CO5										2				2	

Learning Objectives (LO): The student teacher
1. acquires knowledge about the teaching and learning of biological science.
2. understands the planning for instructional materials and learning resources of biological science at secondary level.
   - organisation and maintenance of biological science laboratory.
   - co curricular activities in biological science.
   - concept and techniques of construction of achievement test.
   - professional development of science teacher.
   - resent developments in biological science
3. applies knowledge and understanding in organizing different co-curricular activities in biological science
4. develops skills in
   - preparation of lesson plan for teaching biological science.
   - preparing/selecting and using appropriate instructional materials in teaching biological science.
   - preparing and using different techniques of evaluation of pupils progress.
   - organisation of biological science laboratory.
   - identifying and treating backward and gifted learner in learning biological science.

Unit-1: Planning for Instruction
Identification and organisation of concepts for teaching biological science- Instructional materials required for planning teaching biological science-Preparation of lesson plan for teaching biological science at secondary level.

Unit-2: Instructional Materials
Need and importance of instructional materials – Classification of teaching aids and its uses – Preparation of various teaching aids.

Unit-3: Learning Resources in Biological Science
Biological science text book- Functions of science text book-Characteristics of a good biological science text book- Use of ICT experiences in learning biological science-Using community resources for learning biological science.

Unit-4: Co-curricular Activities in Biological Science
Objectives, organization and activities of Science Club – Organization and purpose of Science Fair- Organization of Science Exhibition and Field Trip- Organization and maintenance of School Garden and Nature Calendar- Collection, preservation and display of Museum Specimen – Maintenance of Aquarium, and Terrarium.

Unit-5: Science Laboratory and its Organisation
Organization, maintenance and safety measures of biological science laboratory.

Unit-6: Evaluation in Biological Science
Concept and techniques of achievement test – Construction, administration, and characteristics of achievement test – Scoring various kinds of achievement tests – Objects based evaluation.

Unit-7: Diagnostic Testing and Remedial Teaching
Meaning and purpose of diagnostic testing – Distinguishing diagnostic tests from the achievement test- Construction and administration of diagnostic testing- Meaning, purpose and importance of remedial teaching in biological science.

Unit-8: Professional Development of Science Teacher

Characteristics of biology teacher- Professional equipment training of teacher's – Role of NCERT and allied agencies for the professional development of science teachers.

Unit-9: Teaching Gifted and Backward Learners

Identification, diagnosis and educational measures of gifted learner and backward learner in learning biological Science.

Unit-10: Recent Developments in Biological Sciences

Biology in the modern world-Bio Chemistry- Bio Physics- Genetic engineering-Ecology and Conservation-Environmental education-Science education.

For Fast Track Learners

Blood Group- Identification- Counting RBC- WBC

Practical Works:
- Collecting shells, feathers, nests, eggs etc.
- Collecting and preserving museum specimens and insects.
- Prepare an e –question bank on any one unit at secondary school level.
- Identify the gifted and backward learner of your class room and prepare a report regarding educational measures taken by you.
- Prepare a report of recent developments in biological science.

Text Books
1. Ameeta, P.,(2005). Methods of Teaching Biological Science. Hydrerabad: Neelkamal Publications Prt.Ltd.
2. Bhatt, B. D., Sharma S.R., (1996). Methods of Teaching Science. Delhi: Kanishka Publishing House.
3. Choudhary, S., (2004). Teaching of Biology. New Delhi: APH Publishing Corporation.
4. Cronbach, L. J. & Snow, R. E., (1977). Aptitude and Instructional Methods. New York: Irvington Publishers.
5. Das, R.C., (1985). Science Teaching in Schools. New Delhi: Sterling Publishers.
6. Deepak Dayal, Richa Bhatt and Biswajit Ray,(2007). Modern Methods of Teaching Biology. New Delhi: APH Publishing Corporation.
7. Krishanamacharyulu,V., (2011). Science Education. Hyderabad: Neelkamal Publications pvt.Ltd,.
8. Lakshmi Gadde, Bhuvaneswara, (2003). Methods of Teaching Life Sciences. New Delhi: Discovery publishers.
9. Malhotra,V., (2007). Encyclopaedia of Modern Methods of Teaching Science. New Delhi: Crescent Publishing Corporation.
10. Mujibul Hasan Siddiqui,(2007). Teaching of Science. New Delhi: APH Publishing Corporation.
11. Narendera Vaidya, (1999). Science Teaching for the 21st century. New Delhi: Deep&Deep Publication.
12. NCERT (1996). Science for Classes IX and X, New Delhi: NCERT Publications.
13. NCERT (2006). National Curriculum Framework for School Education 2005. New Delhi: NCERT Publications.
14. Rajammal,K.,(2009). Methods of Teaching Biological Science. Chennai: Santha Publication,
15. Rajput, J. S. (ed.) (2002). Experiences in School Education. New Delhi: NCERT Publications.

Supplementary Reading

1. Schmeck, R.R., (1998). Learning Strategies and Learning Styles. New York: Plenum Press.
2. Sharma,R.C.,(2002). Modern Science Teaching. New Delhi: Dhanpat Rai Publishing Company(P) Ltd.
3. Sood, J. K., (1985). Teaching Life Sciences. Delhi: Kohli Publications.
4. Taylor D. J. and others, (2004). Biological Science. London: Cambridge university press.
5. Trowbridge, L. W. & Bybee, R. W., (1996). Teaching Secondary School Science.(6thed.). Englewood Cliffs. NJ: Prentice – Hall Inc.

Course Outcomes

The student teacher should be able to

CO1: acquire the basic knowledge about the learning resources in Biological Science at High School Level.
CO2: understand the preparation of lesson plan and the classification of audio-visual aids
CO3: apply the scientific knowledge to identify the student's difficulties in learning Biological Science
CO4: develop skills in constructing an achievement test and analyzing the marks obtained by the students
CO5: develop the curiosity in knowing about in service programme for teachers.

Outcome Mapping

CO/ PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PS O1	PS O2	PS O3	PS O4	PS O5
CO1		3									2				
CO2					3									3	
CO3															
CO4						3									
CO5										3					2

Learning Objectives (LO): The student teacher
- acquires the knowledge of the concepts, terms and teaching methods in social studies.
- understands the planning for instruction and materials in social studies.
- understands the learning sources and activities to the study of social studies
- develops skill by using various types of teaching aids relevant to social studies.
- develops interest to know the achievements in social studies.
- develops positive attitude towards the cultural heritage of India through teaching of social studies

Unit-1: Planning for Instruction
Instructional objectives and specifications – Meaning – Lesson planning – Need and importance – Principles – Steps in preparing lesson plan – Lesson plan discussion.

Unit–2: Materials and Media for Teaching
Audio - Visual aids – Classification of teaching aids – Multimedia approach – Backboard – Charts – Maps – Pictures – Models – Radio – Television – Need and importance function.

Unit–3: Learning Resources
Textbook – Importance – Objectives of social studies textbook – Library – equipments - Functions – Museum.

Unit–4: Co-Curricular Activities
Method of utilizing community resources – Field trip – Kinds of trips – Characteristics – Planning – Educational tour.

Unit-5: Laboratory
Social studies laboratory - Equipments – Maintenance – Functions – Improvising good learning environment.

Unit–6: Evaluation
Concept and process of evaluation – Evaluation and testing – Achievement test – Characteristics of a good test – Construction of achievement test – Interpretation of test scores.

Unit–7: Diagnostic Test and Remedial Teaching
Diagnostic test – Aptitude test – Remedial teaching – Need and importance.

Unit–8: Professional Development of Teacher:
The social studies teacher – Role - Essential qualities – Inservice programme.

Unit–9: Gifted and Backward Learner
Teaching gifted and backward learner – Identification – Educational programme for their enrichment.

Unit–10: Recent Developments in Teaching social Studies
Teaching controversial issues – Teaching current affairs.

For Fast Track Learners

History of archeology – keezhadi - History field of study – History television channel – History TV net work – Sex Education and Social Science – icssr – online Courses in Social Science Teaching – Mooc - Google - Wikipedia.

Practical Works

- A write up on current national problems
- A project report about the significance of any one of the temple in Tamilnadu.
- Write a report on the controversial issues in South India.
- Prepare a report on the researches recently conducted in Social Studies.
- Collect the primary and secondary sources in the Chola period.

Text Books

1. Aggarwal,J.C.Teaching of political science, vikas publishing house Pvt., Ltd., 5, Ansari Road, New Delhi, 1987.
2. Sharama, S.P., T.P.Lamba, C.R.Saxeno and V.Murthy, Teaching of Civics, NaiSarak, Publishing   House Pvt., Ltd., Delhi 1988.
3. Kochhar.S.K., The teaching of social studies, Sterling Publishers Pvt., Limited, New Delhi, 2005.

Supplementary Reading

4. Dash.B.N. &Rahakrishna Murthy, Methods of Teaching Social Studies, Neelkamal Publications Pvt., Ltd., New Delhi 2012.

Course Outcomes

The student teacher should be able to

CO1: prepare a lesson plan in Social Science
CO2: make use of audio –Visual aids
CO3: maintain Social Science Laboratory
CO4: conduct an achievement test and interpret test scores
CO5: identify the gifted and backward learners in Social Science

Outcome Mapping

CO/ PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PS O1	PS O2	PS O3	PS O4	PS O5
CO1		3	1								2				
CO2									3						2
CO3						2				3					
CO4						2								2	
CO5					2							3			

Learning Objectives (LO): The Student Teacher
- acquires knowledge of the instructional materials and media, enrichment program for gifted and programs for backward learners in computer science
- understands the technology of teaching computer science and the use of audio visual aids ,the special qualities professional growth of computer science teacher
- applies knowledge and understanding in organizing different co-curricular activities in computer science
- develops the skills of preparing a good lesion plan in computer science
- develops interest in planning their lessons and presenting them effectively
- develops a positive attitude recent developments in computer science education

Unit-1:Learning Resources

Stating Instructional Objectives, Identifying Learning Experiences, Appropriate Strategies, Teaching Aids; Lesson Plans-Preparation of Lesson Plans-Unit plans

Unit-2: Instructional Materials And Media

Classification of Audio Visual Aids (Projected and Non-Projected)-Their Importance-Principles and Use of Hardware: Film Strip cum Slide Projector, Overhead Projector, and Motion. Radio, TV, CCTV, Tape Recorder, Principles and Use of Software: Objects, Slides, Transparencies, CD, Audio and Video Tapes-Educational Broadcasts: Radio and T.V. Power Point-Use of Internet in Teaching.

Unit-3: Learning Resources

Maths On line learning- Online worksheets – Graphic organizes- Library of videos on a variety of maths- Infographics-Work Books, library: Classification of Books Based on Themes, Role of Magazine, Journals, Periodicals, Encyclopedia, Newspaper And Websites.

Unit-4: Activities of Computer Sciences

Co-Curricular Activities: Organization of Computer science Club, Computer science Exhibitions and Fairs, Fieldtrips and Excursions. Conducting Computer science Olympiads, Computer science Quiz- Importance, Organisimg Computer science Museum, Summer Programmes, Correspondence Course, Recreational Activities—Games, Puzzles And Riddles In Computer science.

Unit-5: Computer Science Laboratory And Organization

Importance of Computer science Laboratory- Planning Of Computer science Laboratory –Components of Computer science Laboratory -Structure and Design – Organization of Laboratory Work, Individual Work and Group Work.

Unit-6: Evaluation Of Computer Science

Tests And Its Types-Achievement Tests–Qualities Of A Good Test- -Principles Of Test Construction-Blue Print And Question Paper-Item Analysis-Standardizing a Test-Elementary Statistics-Measures Of Central Tendency: Mean, Median And Mode–Measures Of Variability-Mean, Standard And Quartile Deviation, Correlation Co-Efficient, Rank Order And Product Moment Correlation-Graphical Representation Of Data: Bar And Pie Diagrams, Histogram, Frequency Polygon-Cumulative Frequency Curve, Ogive, Percentile Ranks, Normal Probability Curve, Kurtosis, Skewness.

Unit-7: Diagnostic Testing &Remedial Teaching

Diagnosis –Principle of Diagnosis-Steps – Importance - Identification of Students' Difficu1ties in Learning Computer science. Planning- Development-Remedial Instruction

Unit-8: Professional Development Of Computer Science Teachers

Characteristics of Computer science Teacher- Competency, Commitment and Performance Areas of Teacher- Professional Development of Computer science Teacher- Teacher Evaluation – Students, Peer and Authority

Types of In-service Programme for Computer science Teachers; Role of Computer science Teachers Association; Journals And Other Resource Materials In Computer science Education; Professional Growth—Participation In Conferences/Seminars/Workshops.

Unit-9: Teaching Gifted And Backward Learners In Computer Science

Individual Differences In Computer science - Causes for Slow Learning in Computer science and Remedial Measures for the Backward - Identification of the Gifted - Enrichment Programmes for The Gifted children

Unit-10: Recent Developments In Computer Science Education

Flipped Learning-Spaced Learning- Spaced Repetition In Computer science, Gamification- Simulations, Team-Based Learning, Block teaching, Jigsaw technique, Virtual Classroom, Blended learning, Hybrid Learning

For Fast Track Learners

Identification of Latest available E-content of Computer Science Teaching- Useful Mobile applications for Learning –Editing Video content using Mobile Applications,

Practical Works:

- Organizations of Computer science Quiz in the classroom
- Observing Computer science Laboratory in the schools and drafting a plan for Computer science Laboratory
- Preparation of Slides, Transparencies and A-v aids for some of the topics in Computer science
- Practicing Recreational Activities like Games, Puzzles and Riddles in Computer science.
- Preparing a report on the places having significance in Computer science for Field trip.

Text Books

1. Rao, P.V.S.,1981 Computer Programming, TMH, Delhi.
2. Roger Humt Hon Shelley,1975 Computers and Common Sense, Prentic Hall (India) Delhi.
3. Shied, Introduction to Computer Science, SCHAVM.
4. StanelyPogrow, Education in the Compute Age, Sage Publication, Delhi, 1993.

Supplementary Reading

1. Steeven M. Rass, Basic Programmking for Education, Pentic Hall, New York, 1990.
2. Jared Keengve, Grace Onchwari,James.N.Oigara,(2014) , Promoting Active learning through Flipped Classroom model, US of America

Course Outcomes

The student teacher should be able to

CO1: acquire the basic knowledge about the learning resources in Computer Science
CO2: understand the preparation of lesson plan and the classification of audio visual aids
CO3: apply the scientific knowledge to identify the students difficulties in learning Computer Science
CO4: develop skills in constructing an achievement test and analyzing the marks obtained by the students
CO5: develop the curiosity in knowing about the in service programme for teachers.

Outcome Mapping

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4	PSO5
CO1		2									2				
CO2					2									3	
CO3															
CO4						3									
CO5										2					2

Learning Objectives (LO): The student teacher
- acquires the knowledge of modern approaches in teaching and its support system.
- develops understanding of the professional development for a teacher of Economics.
- applies the principles of learning through curricular and co-curricular activities.
- develops the skill of using suitable instructional materials.

Unit –1: Modern Approaches in Economics

Modern approaches – Seminar – Symposium – Panel Discussion – Team teaching – Programmed learning – Debate – Tutorials.

Unit –2: System Approaches in Economics

Economics teaching – Classroom management – System approach to Economics teaching – Significance – Merits and Demerits.

Unit –3: Interaction Analysis

Interaction analysis – Flander's system of interaction analysis – Recording classroom events – ground rules of observation – Construction of interaction matrix – Advantages and Limitations.

Unit –4: Teacher Support Systems

Economics department in school - Maintaining records – Economics teacher diary – Record and register of school materials and equipments – Co Operative Stores – Economics Labs – Economics room.

Unit –5: Co-Curricular activities in Economics Teaching

Objectives – Principles – Need and Importance – Role in organization of some co-curricular activities in teaching Economics – ATM, Bank form filling, cheque filling – Economics club – Debate – Field trip, Model Village Survey.

Unit –6: Instructional materials

Meaning – Concept – Text book – Periodicals – Journals – Reference Books – Resource materials – Technical documents – Surveys – Types – Preparation and uses.

Unit –7: Computerization in Economics

Introduction – Internet – Teaching through computer – significance of internet – E mail – Significance - Internet banking – Uses – Video conferencing.

Unit –8: Professional Development

Economics teacher – Pre service and in service programmers – Qualities of a Economics teacher – Responsibilities of Economics teacher – Problems faced by Economics teacher.

Micro teaching – Meaning – Definition – Concepts – Skill development in teaching – Significance of Teacher training.

Unit –9: Research in Economics

Research in Economics Education – Identifying problems in teaching of economics – Techniques of conducting and evaluating research in Economics education.

Unit –10: Guidance Services for Economics Students

Objectives – Educational and Vocational services – Guidance services in school – Individual inventory – Interaction services – Role of Economics teacher in Guidance.

For Fast Track Learners

Indian Economy during Reforms- an Assessments

Practical Works

- Preparation of programmed learning materials in XI standard economics subjects.
- Visit to Rural Development Department.
- Group discussion on marketing.
- Preparing a report of different activities of Economics club.
- Visit to Agricultural Economic Department.

Text Books

1. Dr. M. Harikrishnan, (2006), "*Methods of Teaching Economics".* Thirmavalavan Publications – Chidambaram.
2. Dr. Radha, (2014), "*Value Education",* Prasanna Publishers and Distributors – Chennai.
3. Seema Sharma, (2004), "Modern Teaching of Economics", Anmol Publications Pvt. Ltd – New Delhi.
4. Keith Lumsden, (1967),"*New Development in the Teaching of Economics*", Prentice Hall the Engle Wood, New Jercy.
5. Knopf and Keynon, (1960), "*The Teaching of Elementary Economics",* James and Status Holt Rinehart and Wiston, New York.

Supplementary Reading

1. Amita Yadav, The Teaching of Economics.
2. Vakil, Teaching of Economics.
3. Journal of Economics Education.
4. Vendanayagam, Hand Book for College teachers.

Course Outcomes

The student teacher should be able to

CO1: make use of modern methods of teaching Economics
CO2: construct the interaction matrix
CO3: maintain the records and register of school materials and equipments
CO4: fill up bank documents and use ATM
CO5: make use of Internet Banking

Outcome Mapping

CO/ PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PS O1	PS O2	PS O3	PS O4	PS O5
CO1									3						3
CO2					3									3	
CO3									2					3	
CO4				2											2
CO5				2											2

Learning Objectives (LO):   The student teacher
- acquires knowledge of the terms and concepts regarding the various methods and techniques of teaching,
- understands the different types of curriculum, methods of teaching and technology of teaching.
- applies the knowledge in analyzing, selecting and adopting the suitable methods, techniques and for the purpose of teaching,
- develops skills in preparing curriculum, and using the suitable techniques in test construction.
- develops interest in knowing the recent development in the teaching methodology, and technological developments, and
- develops a desirable positive attitude towards the teaching of commerce.

Unit-1: **Modern Approach in Commerce**
        Modern approach- socialized recitation methods (Discussion methods) informal- seminar, symposium, workshop technique, panel discussion, individualized instruction methods- role playing, individual assignment- team teaching.

Unit-2: **Systems- Approach**
        Commerce teaching and classroom management- systems approach to the commerce teaching- significance, merits and demerits.

Unit-3: **Interaction Analysis**
        Class room interaction analysis- classroom climate types of teacher based on leadership styles- autocratic, Democratic and laissez faire- significance.

Unit-4: **Teacher Support System**
        Commerce department in school system- commerce lab- teacher dairy- Maintenance- record and registers to be maintained equipments- essentials and desirable.

Unit-5:Co-Curriculum Activities
        How to handling ATM, Form Filling-Objectives, principles, need and importance role in organization of some co-curricular activities in teaching of commerce- commerce club, debate, field trip, Banking activities.

Unit-6: **Instructional Materials**
        Meaning- concept- need and importance- qualities of a good text book, criteria for text book evaluation role of library- periodicals- journals- reference books- resource materials technical documents- surveys- types- preparation and uses.

Unit-7: Computerization in Commerce
        Tally system in commerce- E-trade, E-commerce, E-resources in commerce and accountancy.

Unit-8: Professional Development
        Commerce teacher traits of a good commerce teacher- qualities of a commerce teacher- professional qualities- problem faced by the commerce teacher in the digital era. Role of commerce teacher in school society.

Unit-9: Guidance Services for Commerce Student
        Guidance programme for objectives- function- educational and vocational guidance services in school- individual inventory service, information service, counseling service, placement service, follow up service- role of commerce teacher in guidance.

Unit-10: Research in Commerce Education

Research on commerce and accountancy education- computer in commerce and accountancy- Use of ICT and modern technology in commerce Research. Practical role of commerce teacher in school society- duties and responsibilities.

For Fast Track Learners

Business Transactions and source documents – concept of computerised Accounting System

Practical works:
- Visit to Co-operative Bank
- Visit to Credit societies
- Trip to nationalized banks
- Visit to share trading centre
- Prepare a list of online trading activities in your area

Text Books
1. Kochhar, S.K. Methods and techniques og teaching, sterling publishers pvt. Ltd.,
2. New Delhi.
3. Passi, B.K., Becoming better teacher & micro teaching approaches, sahityamudrasolays, Ahanadabad, 1976.
4. Sampth et.al., introduction to education technology, sterling publishers, NewDelhi, 1990.
5. Flanders A. Ned, Analyzing teacher behavior, addission – Wesley publishing company, USA, 1979.
6. Ornistein, Allen C., and et al. Curriculum Foundation, principles and issues prentice hall, Englewood cliffs new jersey, USA, 1988.
7. Dececee John, P. and et al., The psychology of Learning and Instruction, prentice Hall of India, New Delhi.

Supplementary Reading
1. Association of Indian Universities, New Technology in Higher Education, Edited by Shah Sy., New Delhi, 1986.
2. Tonne, Pophan and Freeman, Methods of Teaching Businees Subjects,
3. McGraw Hill 1965.
4. Tarachand, Principles of Teaching, Anmol Publishing, New Delhi, 1990.
5. Leu, M. Carey, Measuring and Evaluating School Learning, Allyn and Bacon Inc. USA, 1988.

Course Outcomes

The student teacher should be able to

CO1:   make use of modern methods of teaching Commerce
CO2:   construct the interaction matrix
CO3:   maintain the records and register of school materials and equipments
CO4:   fill up bank documents and use ATM
CO5:   to make use of Internet Banking

Outcome Mapping

CO/ PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PS O1	PS O2	PS O3	PS O4	PS O5
CO1									3						3
CO2					3									3	
CO3									3					3	
CO4				3											3
CO5				3											3

Learning Objectives (LO): : The student teacher
- acquires the knowledge of ICT in the context of learning
- develops familiarity with the basic usage of computer in learning
- applies the tools and techniques of learning through ICT
- develops the skills of hands on experience with computer for learning

Unit – 1: Importance of ICT in Education

Information and communication Technology-concept-Nature Scope in –Construction of knowledge – Sources of audio-visual media and computer.

Unit – 2: Learning through Audio-Visual Media

Use of audio-Media-Patterns-Use of TV/Recordings – Use of other Media-Printed – Types – Sources.

Unit – 3: Learning through Computers

Utilizing Computers in schools-Presentation – Power Point-Excel-use of Browsing resources-Downloading relevant materials.

Unit – 4: Learning through Technology – based resources

Professional self-development- image of search engines – generation of Blogs – Collaborative learning environment.

Unit – 5: ICT integrated Learning

Innovative usage of ICT – Case studies-environment for Learning issues in interest usage-reliability of information – Social net working – downsides-Plagiarism. SWAYAM (Study Webs of Active–Learning for Young Aspiring Minds)- MOOCs(massive open online course)

Text Books
1. Bruner, J.S (1963) the Process of Education, New York: Vintage Books.
2. Dececon, John, P(Ed) (1964) Educational Technology, New York, Holt.
3. Kulkarni.S.S (1986) Introduction of Educational Technology, New Delhi: Oxford & IBH.
4. Kumar.K.L (1997) Educational Technology, New Delhi: New Age International (p) Ltd.

Supplementary Reading
1. Rajasekar.S (2010) Computer in Education, Neelkamal Publications Pvt, Hyderabad.
2. Rajasekar.S (2005) Computer Education and Educational Computing, Neelkamal Publishing Pvt, Hyderabad.

Course Outcomes

The student teacher should be able to

CO1: realize the importance of ICT in Education
CO2: practice teaching through audio visual media
CO3: utilize computer for teaching through power point presentation
CO4: ascertain different technology based resources
CO5: perceive about innovative usage of ICT

Outcome Mapping

CO/ PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PS O1	PS O2	PS O3	PS O4	PS O5
CO1		2													3
CO2					3									2	
CO3									3				2		

CO4								3						
CO5			2									2		3

Year-II(2019-2020)   19BEDP202: Health and Physical Education -[Part-2]   Credits : 1

Hours   : 1

Learning Objective (LO): The studentteacher
- knows the needs and interests, physical, emotional and mental changes during
- understands the communicable and non-communicable diseasesand its sources.
- develops positive attitude towards nutritional needs of human body and its imparts.
- develops the skill of games, sports, sports ethics, motivation, regulations.
- develops the skill of following rules and regulations of sports and fitness.

Unit-1: Human body:
　　　　Human body; Growth and development of children at different ages, their needs and interests, psycho-social development; Physical, emotional and mental changes during adolescence; Concept of body image; Parent-peer-adolescent relationship; Sexual abuse; Myths and misconceptions regarding growing-up; Management of stress and strain and life skills

Unit-2: Dietary requirements of human body:
　　　　Dietary requirements of human body with special emphasis on the nutritional needs according to age, sex, occupation, pregnancy and also with reference to sports-personship; Need for diet planning; Food and water; Safety and laws.

Unit-3: Occupational Health:
　　　　Occupational health hazards and its prevention; Commonly-abused substance and drugs and ways of prevention and inhabitation Fundamentals skills of games and sports; Sports for recreation and competition; Rules and regulations of sports; sports ethics; sports awards and scholarships, sports-personship Games and Sports—athletics, games, rhythmic activities and gymnastics Development of physical fitness; Postures; Importance of relaxation; Fitness tests; Resources and services for games and sports.

Text Books
Supplementary Reading
2. Dhanajoy, S. &Seema.K(2007) Lesson Planning: Teaching methods and class management in physical education, New delhi : Khal Sahitya Kendra.
3. Nash.T.N. (2006) Health and Physical Education, Hyderabad: Nilkamal Publishers.
4. Prasad,Y.V. (2006) Method of teaching Physical eEducation, New Delhi : Discovery Publishing house.
5. Mangal.S.K (2005) Health and physical education, Ludhiyana: Tandon Publication book Market.
6. Kanele, B.S & Kumar C.P (1996) Text book on health and physical education , Ludhiyana, Kalyana Publishers.
7. Reema.K(1996) Physical fitness, New Delhi: Khel Sahitya Sports Publication.

Supplementary Reading

1. Ramachandran L.T &Dharmalingam (1993) Health Education A New approach New Delhi, Vikas Publishers Ltd.
2. Erikson O.B (1990) Sports medicine, health and medication, Enfield: Guninness Publishing Road.
3. Sangral.K (1977) Methods in physical education ,Ludhiyana, Prakash Brothers.

Outcome Mapping

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PS O1	PS O2	PS O3	PS O4	PS O5
CO1				3								2			
CO2		2										1			
CO3									3			2			
CO4				2								1			
CO5				2											3

Learning Objectives (LO): The student teacher will be able to
- enrich their aesthetics and arts experience;
- strengthen their abilities to appreciate and create various forms of visual arts work aesthetically and critically;
- solve problems creatively through imaginative thinking and so encourage individuality and enterprise
- value the confidence and self-esteem through valuing self expression
- foster a sense of excellence in and appreciation of the arts in local, regional, national and global contexts, both past and present

Unit-1:
Knowledge of Indian traditions – festivals – traditional arts and crafts – hindutemples - setting stage for performance – developing aesthetic sensibility in costumes and decoration
Unit-2:
Cultural heritage of India and its relevance in education - integrate arts forms in education
Unit-3:
Different kinds of instruments – string – air – drums – patriotic songs – motivating students for performance and participation .
Unit -4:
 Indian lifestyle and beliefs -Family system – marriages – rituals – care for environment

Unit -5 :
Indian values -Ahimsa – Vasudeva kudambakam (Unity in diversity) – athithi deva bhava – spiritual path

Text Books
1. Cultural heritage of India – SCERT
2. Centre for Global education , Indian society and ways for living .
3. https://asiasociety.org
4. Shymala Gupta (1931) Art Beauty and creativity, DK printword private
5. limited , New Delhi
6. Dharmaraj (2004) Indian History Vo.4, 10 C,Publications, Sivakasi.
7. Marshall Cavendish (1984) Home craft Published by MC books Ltd., London

Supplementary Reading
1. Dr.P.Swaminathanthiruthalathirumuraithiratu, thiruvaduthuraiathinam 2013
2. K.SomasundaramUlakelam, ThiruvaduthuraimAatheenam 2012
3. Indian Heritage ,http://www.indian-heritage.org/
4. Indian Culture and Heritage published by national Institute of open schooling

Course Outcomes

The student teacher should be able to

CO1: exhibit their work in an aesthetic way
CO2: appreciate nature and create art works using various materials
CO3: gain knowledge about the various Indian traditions & values
CO4: identify the different types of musical instruments
CO5: integrate arts into education

Outcome Mapping

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4	PSO5
CO1				3								2			2
CO2		2										1			
CO3									3			2			
CO4				2								1			
CO5				2											2

I. Learning Objectives (LO): The Student Teacher
- acquires Knowledge about the planning, organizing, financing, executing and evaluating the tour
- understands the importance of direct experience gained through Educational tour
- applies the Knowledge gained in the Educational tour in the relevant situations
- develops Skills In organizing and executing Educational tours

Unit-1: Camp
Camp-History of camp-Need for the camp-Developmental benefits to students-Types of Camp-Preparing for a Camp – Community Resources for Camp

Unit-2: Camp Activities
Camp activities-Self-awareness activities- Self-esteem activities- Social activities-Peace activities- Team building- Nature games- Environmental activities- Internet activities-Recreational activities

Unit-3: Educational Tour
Objectivities-Need and Importance of Educational tour-Learning experiences-Need for observing and recording

Unit-4: Planning For Educational Tour
Planning for Educational tour- Preliminary enquiry , Permission to be sought, Budgeting , Mapping of the places visited, Blue print of the places of Visit, Observation manual, Tour report -Execution of educational tour - Organising for Educational tour - Availing community resources- - Recreational activities for Educational tour

Unit-5: Precautions In Educational Tour
Health and safety measures-Role of Teacher-Preventive measures that has to be followed - evaluating the tour -Educational implications

Text Books

1. K. L. Kumar, Educational Technology, New age International Publishers, New Delhi, 1996.
2. Mohanty. J, Educational Broadcasting: Radio and Television: Sterling Publishers, 1994.

Supplementary Reading
1. Sampath. K and Panneerselvam.A, Introduction to Educational Technology, New Delhi, Sterling Publishers, Pvt. Ltd, 1981.

Course Outcomes

The student teacher should be able to

CO1: acquire the knowledge about community camp and educational tour
CO2: understand the importance of community camp and educational tour
CO3: conduct the community camp and educational tour

Outcome Mapping

CO/ PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PS O1	PS O2	PS O3	PS O4	PS O5
CO1								3						2	
CO2							3						**2**		
CO3				3										2	
CO4															
CO5															

Learning Objectives (LO): The Student teacher
- acquires knowledge of the concepts and terms of educational psychology.
- understands the different aspects of learners and learning.
- understands the procedures in psychological testing.
- familiarizes in performing experiments in various aspects of educational psychology.
- develops interest in collecting data and interpretation of scores.

Unit-1: Psychological Testing

Psychological laboratory- Its necessary and management in teacher training institutions- Psychological Testing- Meaning- Need importance- Uses.

Unit-2: Attention, Concept Formation, Memory, Attitude

Attention- Meaning- Significance- Chief characteristics- Types of attention- Determinants- Securing students attraction- Distraction.

Concept Formation- Meaning- Types of concepts – Kinds of concept- Important characteristics- Stages involved in formation of concepts- Concept of children and adults- Teaching of concepts- Measurement.

Memory- Meaning- Characteristics- Processes of memory- Learning storage, retention, retrieval, recognition- Short term and long term memory- Good methods of memorization- Measurement of memory.

Attitude- Meaning- Positive and negative attitude- Attitude scales.

Unit-3: Aptitude, Interest, Learning, Motivation.

Aptitude- Meaning- Characteristics of aptitude- Aptitude tests.

Interest- Meaning- Factors affecting interests- Types of interest- Social, recreational, personal and vocational- Interest inventories.

Learning- Meaning- Characteristics of learning- Transfer of training or learning- Meaning- Forms of transfer- The experimental paradigm.

Motivation- Meaning- Characteristics- Process- Functions- Motives and related concepts- Motive, need, drive, incentive- Goal- Motivational Tests.

Unit-4: Intelligence, Personality

Intelligence- Definitions- Nature- Types- Characteristics- Types of Intelligence- Measurement of intelligence- Classification of intelligent tests- Verbal, Non-Verbal and performance tests- Uses of intelligence tests.

Personality- Meaning- Characteristics- Factors influencing personality development- Physique, social, psychological- Classification- Assessment of personality.

Unit-5: Case Study

Case Study- Meaning- Need Identification of Pupil- Diagnosis of the case- Statement of the Problem- Interview with the pupil- Collection of data- General Data- Family Environment- Health- Scholastic- Co-curricular activities- Personality traits- Educational and Vocational Interest- Social and emotional adjustment- Analysis and recommendations.

Text Books

1. Chauhan. S. S. 'Advanced Educational Psychology' UBS Publishers Pvt. Ltd, New Delhi, 2007.
2. Kulshrestha. S. P 'Educational Psychology', Vikas Publishing House Pvt. Ltd, 1988.
3. Dandapani. S 'A Text Book of Advanced Educational Psychology', Ammol Publications Pvt. Ltd, New Delhi, 2000.
4. Crow.L.D and Crow.A, Educational Psychology, Eurasia Pub. House, New Delhi, 1973.

Supplementary Reading

1. Eillis, Educational Psychology, Affiliated East, West Press, New Delhi, 1965.
2. Guilford.J.P, Personality, Mc Graw Hill, New York, 1978.
3. Hilgard.F.R. Theory of Learning, Appleton Century, New York, 1958.

Course Outcomes

The student teacher should be able to

CO1: to make use of psychological test
CO2: follow scientific method as it is used by psychologists
CO3: apply the knowledge of attitude, interest, aptitude testing procedure in classroom situations
CO4: adopt motivation techniques and concept of intelligent personality in teaching and testing situations
CO5: prepare case study and maintain a case study record for individuals and institutions

Outcome Mapping

CO/ PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PS O1	PS O2	PS O3	PS O4	PS O5
CO1	2	2										3			
CO2			2												
CO3														2	
CO4					2										
CO5			2	2				2						2	

Learning Objectives (LO): The Student Teacher
- acquires knowledge of the concepts forms principles and uses of instructional software.
- develops understanding of the principles and procedures involved in the preparation of instructional software.
- develops skills in using and manipulating the apparatus used as instructional software.
- develops interests on various functions and uses of instructional software.

Unit-1: Instructional Software
Definition of Instructional Software- Need and importance of Instructional Software.

Unit-2: Classification of Non Projected aids and Projected aids
Description- Operation and uses of Non – Projected Aids- Graphics Aids: Charts Display Boards: Models Purpose of Model in Instruction; Materials for preparation of Models.

Unit-3: Operation of Different Projected aids
Projected Aids: Projected Materials and Projectors: Power source for operation of projector: The illuminating System in the Projector; Epidiascope; Slide Projector; Filmstrips; The overhead projector; methods of preparing transparencies.

Unit-4: Educational Application of AV aids
Educational Broadcasts: The radio as aid to teaching; Radio Scriptwriting; Record player, Tape Recorder, Slide- Tape Presentation- 16mm projector uses- Educational television (ITV) Computer- Working- L.C.D Projector CCTV (Theoretical aspects: Loop cassette film projector).

Unit-5: Technical Presentation
Preparation of chart, album, Scrapbook, photography slide OHP Transparency- PowerPoint slides- Digital Flip Albums.

Text Books
1. Bose, C. R. and Ramachandran Educational Technology, New Delhi, NCERT.
2. Fred, John, Application and Operation of AV Equipment in Education, John Wiley.
3. Haas and Parker, Preparation and use of AV Aids. Prentice- Hall of India, 1955.
4. K. L. Kumar, Educational Technology, New age International Publishers, New Delhi, 1996.

Supplementary Reading

1. Mohanty. J, Educational Broadcasting: Radio and Television: Sterling Publishers, 1994.
2. Sampath. K and Panneerselvam.A, Introduction to Educational Technology, New Delhi, Sterling Publishers, Pvt. Ltd, 1981.

Course Outcomes
The student teacher should be able to

CO1:   attain cognition about Instructional Software
CO2:   differentiates between Non-Projected aids and Projected aids
CO3:   handle different Projected aids
CO4:   explain about the Educational Application of A-V aids
CO5:   practice in preparation of different technical presentation

Outcome Mapping

CO/ PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PS O1	PS O2	PS O3	PS O4	PS O5
CO1		3												2	
CO2							2							2	
CO3		2												2	
CO4	3													2	
CO5						2			2					2	

Learning Objectives (LO): The studentteachers
- acquires knowledge about the assessment and evaluation
- understands the
    data analysis for assessment and evaluation.
    the need and importance of feedback and reporting.
    the examination reforms in India and the future directions of examination reforms.
- applies knowledge to use wide range of assessment tools, and select and construct these appropriately.
- develops skill to evolve and adapt realistic, comprehensive and dynamic assessment procedures.

Unit -1: Data Analysis

Statistical tools—Percentage, graphical representation, frequency distribution, central tendency, variation, normal distribution, percentile rank, correlation and their interpretation.

Unit -2: Feedback and Reporting

Feedback as an essential component of formative assessment- Use of assessment for feedback; For taking pedagogic decisions- Types of teacher feedback (written comments, oral)- Peer feedback- Place of marks, grades and qualitative descriptions- Purposes of reporting: To communicate Progress and profile of learner- Basis for further pedagogic decisions- Reporting a consolidated learner profile.

Unit-3: Examination System: A Sociological and Psychological Analysis of the Related Issues

Examination for gradation- Examination for social selection and placement-Impact of the prevailing examination system on student learning and stakeholders- Entrance tests and their influence on students and school system.

Unit -4: Examination Reform Efforts in India

Examination reform efforts in India based on: Secondary Education Commission (1952-53)- Kothari Commission (1964-66)- National Policy on Education (1986) and Programme of Action (1992)-National Curriculum Framework (2005) developed for school education- National Focus Group Position Paper on Examination Reform .

Unit -5: Directions for Examination Reform

Introducing flexibility in examination-taking requirements- Improving quality and range of questions in exam papers including school-based credits- Alternative modes of certification-Examination management- Role of ICT in examination

Text Books
1. Bloom, Benjamin, S. et.al. (Ed.),(1956). *Taxonomy of Educational Objectives* – Handbook I Cognitive Domain.
2. Ebel and L.Robert. (1965), Measuring Educational Achievement, prentice hall international. Inc, USA.
3. Gronlund, Norman, E., (1965). *Measurement and Evaluation in Teaching.* New York:The Macmillan Co.
4. Gronlund, N.E.,(1970). Stating Behavioural objectives for Class Room Instruction, X. NCERT Publications.
5. Krathwohl David, R., et.al. *Taxonomy of Education Objectivies*– Handbook–II, Affective Domain, New York:DavidMckey.
6. Lindvall, C.M Co. Inc (1961). Testing and Evaluation – An Introduction.

Supplementary Reading

1. *Best John*, W. *Research in Education*, Prentice Hall of India. New Delhi, 1989,
2. Barnes John, B. Educational Research for Class Room Teachers.
3. Sukia, S.P.,(1963). *Elements of Educational Research.*Bombay:Allied Publishers.

Course Outcome

The student teacher should be able to

CO1: to explain the interpretation of various statistics
CO2: identify the importance of assessment
CO3: analyse about different examination systems
CO4: comprehends examination reforms
CO5:   develops skill to evolve and adapt realistic, comprehensive and dynamic assessment procedures.

Outcome Mapping

CO/ PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PS O1	PS O2	PS O3	PS O4	PS O5
CO1	2	3													2
CO2						3					3		2	2	
CO3						3								2	
CO4						3						3		3	
CO5															3

Learning Objectives (LO): The student teacher
- acquires knowledge of the key concepts – gender, gender bias, gender stereotypes empowerment, gender parity, equity, patriarchy and feminism.
- understands the paradigm shift from women's studies to gender studies.
- examines the gender issues in school, curriculum and textual materials across disciplines.
- develops the skill of Preparing a report on portrayal of women in media

Unit – 1: Gender Issues: Key Concepts:
Gender, Sex, Sexuality, Patriarchy, Masculinity and Feminism, Gender bias, Gender stereo tying and empowerment. Equity and in equalities on gender related issues.

Unit – 2: Gender studies: Paradigm Shifts:
Paradigm shift from women's studies to gender studies Historical backup- Social reform towards gender equity- policies and committers on gender education.

Unit – 3: Gender, Power and Education:
Gender difference, Gender identities and Socialization- family- School. Gender, Culture and Institution: Class, Caste, Religion and Region.

Unit – 4: Curriculum on Gender Power
Gender equity- in curriculum since Independence- Teacher as an agent and change- Life skills- Sexuality- Schooling of girls.

Unit – 5: Gender- Sexual Harassment and Abuse
Linkages and differences between reproductive rights and sexual rights- Development and sexuality- Gender conflicts- Social and emotional- importance of addressing- Sexual abuse- Sexual harassment- School, family, work place, media and

Practical Works
- Prepare a report on portrayal of women in media
- Submit a report on role models of women in various fields of achievement.
- Prepare list of activities/ Programmes to address gender issues.
- Classify life skills to develop the secured sexuality.
- Analysis activities in schools to solve gender based problem.

Text Books
1. Ambedkar,S.N. and Nagendra, Shilaja (2005) Women Empowerment and Panchayati Raj. Jaipur: ABD Publishers.
2. Brush, Lisa D. (2007) Gender and Governance. New Delhi: Rawat Publications.
3. Jha, Ashok Kumar (2004), Women in Panchayat Raj Institutions. New Delhi: Anmol Publications Pvt. Ltd.
4. Jha, Deepika (2010) Women in World Politics. New Delhi: Pearl Books.
5. Nanda, Roshini (1996) Women Development and Panchayati Raj. Rohtak: Spellbound Publications Pvt. Ltd.

Supplementary Reading
6. Saxena, Alka (2011) Role of Women in Reservation Politics. New Delhi: Altar Publishing House.
7. Saxena, Alka (2011) Situational Analysis of Women in Politics. New Delhi: Altar Publishing House.
8. Saxena, Alka (2011) Women and Political Leadership. New Delhi: Altar Publishing House.

Course Outcomes

The student teacher should be able to

CO1:	explain the key concepts of gender, gender bias, patriarchy and feminism
CO2:	analyse the paradigm shift from women's studies to gender studies
CO3:	a review of the gender issues in school curriculum and textual materials across disciplines
CO4:	enrich the skill of removing gender-based issues in schools and related pedagogical areas
CO5:	develops the skill of Preparing a report on portrayal of women in media

Outcome Mapping

CO/ PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PS O1	PS O2	PS O3	PS O4	PS O5
CO1		2					2				3				
CO2														2	3
CO3				3		2							3		
CO4														3	
CO5					2										3

Learning Objectives (LO): The student teacher
- acquires knowledge of education of children with disabilities.
- understands the strategies related to innovative practices of education for children with special needs
- applies the knowledge and understanding in handling children with different abilities
- develops positive attitude towards children with special needs
- develops skill of planning programmes for children with different abilities.

Unit -1: Perspectives in Education of Children with special need
History of Education for children with special needs-Trends and approaches -Models-Functional Model – Human rights model-Concept of special Education.

Unit -2: Planning perspectives on inclusive education
Educational provisions in the UN convention on the Rights of persons with Disabilities (UNCRPD), 2006. National Policy-Education of students with disabilities 2006.

Unit-3: Identifying special needs
Classification of students with special needs-Concepts characteristics-Specific learning difficulties-Locomotors Neuromuscular Disaster, mental retardation, Austism, Mental Illness.

Unit-4: Classroom practices for solving learning difficulties
Preparing for readiness to address special needs-Understanding advancements, devices, equipments for different disabilities-Class room management – Lesson – Planning – TLM.

Unit-5: Pedagogical Strategies
Developing strategies for students with special needs-Co-operative learning – peer tutoring – Social Learning reflective teaching-Support Services-Addressing Social Climate of the class room.

Text Books
1. Narayanasamy.S&Kansara.J (2006) Family Community and Hearing Child. New Delhi: Kanishka Publishers.
2. Premavathy.V&Nagomi.V.G. (2005) Handbook: Education of Children with low vision, rehabilitation council of India, New Delhi: Kanishka Publishers.
3. Reddy.G.L (2004) Hearing impairment: An educational consideration, New Delhi: Discovery Publishing House.
4. VenkatesanS (2003) Children with developmental disabilities: A training guide or parents, teachers and car givers, New Delhi: Sage Publications.

Supplementary Reading

1. International Human Resource Development Centre for the Disabled, Sri Ramakrishna Mission Vidyalaya.
2. Man.K&Hallahan.M.J (1992), Exceptional Children: Introduction to special education, New Jersey: Prentice Hall Inc.

Course Outcomes

The student teacher should be able to

CO1: to acquire knowledge of children with special needs
CO2: understand the educational provisions in the UN convention on the rights of the children with special needs.
CO3: apply scientific knowledge to identify the students with special needs
CO4: develop classroom practices for solving learning difficulties
CO5: develop interest in knowing more about the learning difficulties of the students with disabilities

Outcome Mapping

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO10	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	2	2										3			
CO2										2					
CO3							2								
CO4			2											2	
CO5			2												