THE GANDHIGRAM RURAL INSTITUTE
(Deemed to be University)

Ministry of Education, Govt.of India

OBE DOCUMENT

B.Ed SYLLABUS
(2021-2022 Onwards)

TWO YEAR – FOUR SEMESTER PROGRAMME

DEPARTMENT OF EDUCATION

SCHOOL OF SOCIAL SCIENCES

GANDHIGRAM, DINDIGUL – 624 302.

TAMILNADU, INDIA.

Two Year B.Ed., Programme - Syllabus (2021-2022)

S. No	Category	Course Code	Title of the Course	No. of Credits	Hours	CFA	ESE	Total
	Semester - I							
1	Core Paper	21EDNU 0101	Education in Contemporary India	4	4	40	60	100
2		21EDNU 0102	Childhood and Growing Up	4	4	40	60	100
3		21EDNU 0103	Basics of Teaching and Learning	4	4	40	60	100
4	Elective	21EDNU 01D1	Assessment and Evaluation	4	4	40	60	100
		21EDNU 01D2	Guidance and Counselling					
		21EDNU 01D3	Health and Yoga Education					
5	Optional I	21EDNU 01O1	Teaching of Language English - I	4	4	40	60	100
		21EDNU 01O2	Teaching of Language Tamil - I					
		21EDNU 01O3	Teaching of Mathematics - I					
		21EDNU 01O4	Teaching of Physical Science - I					
		21EDNU 01O5	Teaching of Biological Science - I					
6	Optional II	21EDNU 01O6	Teaching of English Education - I	4	4	40	60	100
		21EDNU 01O7	Teaching of Tamil Education - I					
		21EDNU 01O8	Teaching of Mathematics Education- I					
		21EDNU 01O9	Teaching of Physical Science Education - I					
		21EDNU 01O10	Teaching of Biological Science Education - I					
7	Non-Credit Course	21EDNU 01F1	Remedial Teaching in Schools	-	-	50	-	50
8		21GTPP0001	Gandhi's Life, Thought and Work	2	2	20	30	50
	Semester - II							
9	Core Paper	21EDNU 0204	Learner and Learning	4	4	40	60	100
10		21EDNU 0205	Critical Understanding of Information and Communication Technology	4	4	40	60	100
11		21EDNU 0206	Psycho –Social and Philosophical bases of Education	4	4	40	60	100
12	Elective	21EDNU 02D1	Cognitive Science in Education	4	4	40	60	100
		21EDNU 02D2	Vocational Education and Training					
		21EDNU02D3	Gender Issues in Education					
13	Optional I	21EDNU 02O1	Teaching of Language English - II	4	4	40	60	100
		21EDNU 02O2	Teaching of Language Tamil - II					
		21EDNU 02O3	Teaching of Mathematics - II					
		21EDNU 02O4	Teaching of Physical Science - II					
		21EDNU 02O5	Teaching of Biological Science - II					
14	Optional II	21EDNU 02O6	Teaching of English Education - II	4	4	40	60	100
		21EDNU 02O7	Teaching of Tamil Education - II					
		21EDNU 02O8	Teaching of Mathematics Education - II					
		21EDNU 02O9	Teaching of Physical Science Education - II					
		21EDNU 02O10	Teaching of Biological Science Education- II					
15	Practicals	21CSKU 0202	Communication & Soft Skills	2	2	50	-	50
16	Non-Credit Course	21EDNU 02F2	Field Visit in Schools	-	-	50	-	50
	Semester - III							
17	Core Paper	21EDNU 0307	Curriculum and School	4	4	40	60	100
		21EDNU 0308	School Management, Leadership and Action Research	4	4	40	60	100
18	Practicals	21EDNU 03P1	School Internship (I-Phase)	6	6 Weeks	75	75	150
19	Practicals	21EDNU 03P2	Evaluation of Teaching Competence	4	4 Weeks	40	60	100
20	Modular Course (Any one)	21EDNU 03M1	Teaching Learning Materials(TLM) Preparation	2	2	50	-	50
		21EDNU 03M2	Environmental Education					
21	VAC	21EDNU 03VA1	Human Values and Professional Ethics in Education	1	1	50	-	50
22	Non-Credit Course	21EDNU 03F3	Extension Work in Villages	-	-	50	-	50
23	VPP	21VPPU 0301	Village Placement Programme	2	2	100	-	100
	Semester - IV							
24	Core Paper	21EDNU 0409	Practices in Inclusive Education	4	4	40	60	100
25	VAC	21EDNU 04VA2	Soft Skills for Teacher Education	1	1	50	-	50
26	Practical	21EDNU 04P3	School Internship (II-Phase)	6	6 Weeks	75	75	150
27	Practical	21EDNU04P4	Evaluation of Teaching Competence	4	4 Weeks	40	60	100
28	Project	21EDNU 0410	Project Report	4	4	40	40+20	100
			Total	**94**	**94**	**1340**	**1260**	**2600**

In place of discipline centric elective or generic elective, a student can opt for MOOC-SWAYAM/NPTEL or other online courses conforming to the stipulations of credit transfer policy of the institute. The student teachers should complete at least one SWAYAM course in a year.

Two Year B.Ed Programme

Preface

The National knowledge commission (NKC) has observed that teachers are the single most important element of the school system. The prosperity of a nation depends on its enlightened human resource, which depends on the quality of education. Quality relies on a teacher which in turn relies on quality of teacher education. The two year B.Ed course is a pre-service teacher training programme offered by GRI as per NCTE Regulation, 2014 with basic objective to prepare quality secondary school teachers in Science and Mathematics in Indian school system. The programme aims at Science and Professional studies comprising foundations of education, pedagogy of school subjects and practicum related to the tasks and functions of a school teacher. It maintains a balance between theory and practice, and coherence and integration among the components of the programme. The course also ensures opportunities for higher learning of the students. The syllabus is designed in four semesters.

Objectives of the Course

- To provide excellence in the field of teacher education resulting in generating quality teachers.
- To develop content as well as pedagogical knowledge of the students.
- To acquaint the prospective-teachers with innovative teaching practices as envisaged in National Curriculum Framework for Teacher Education.
- To discover different human values inherent in the concepts.
- To sensitize emerging issues such as environment, population, gender equality and peace education.

Unique Features of the Programme

- Compulsory Non credit Course on Gandhian Thought.
- Choice Based Credit System **(**CBCS)
- Vocational Training
- Group Project
- Village Placement Programme(VPP)
- ICT & E – Content Development Training
- Soft skills and Communication skills training
- Introduction to Cognitive Science

Duration of the Course:

Duration of the programme shall be of two academic years comprising four semesters with 200 days per year.

Medium of Instruction

The medium of instruction is English.

Eligibility for Admission

A pass in UG / PG degree with 50% marks in Mathematics, Physics, Chemistry, Botany, Zoology , English and Tamil. Engineering graduates with Mathematics, Physics and Chemistry.

Relaxation and Admission for SC/ST/OBC/PWD candidates as per the norms of Govt. of India

Practicum

- **School Internship**
- **Records**
- **Psychology Practical**

I School Internship Programme:

School experience and internship in teaching is an integral component of a teacher preparation program to help student teachers learn and enhance their professional role. The school experience are designed to help teacher candidates observe and understand the fundamentals of practice, and to gradually assume full responsibility for classroom teaching during the internship in teaching experience. During the programme, the duration of internship will be 20 weeks. Objectives: To enable the prospective teacher,

- ✓ Exposure on macro-teaching
- ✓ Get an opportunity to observe the teaching of experienced teachers.
- ✓ Train under able guidance of experienced teachers.
- ✓ Participate in all other school activities.
- ✓ Have a feel of total school experience.
- ✓ Imbibe the professional ethics values and development activities.

Duration of internship will be 20 weeks

SEMESTER	NUMBER OF WEEKS
II Semester	4
III Semester	8
IV Semester	8
Total	20

II Records

1. Observation Record Optional I&II
2. Subject Practical Record Optional I&II
3. Micro Teaching Record Optional I&II
4. Lesson Plan Record-Optional I&II
5. Instructional Material Record
6. Construction of an achievement Test and Measurement Record test and interpretation of test for Optional I&II
7. School Internship Record
8. Field Visit Record
9. Micro Teaching Record optional I&II
10. Programmed Learning Material Record optional I&II
11. Reflective Journal Record
12. Educational Technology Record
13. Audio Visual Record
14. Case Study Record
15. Psychology Experiments Record
16. Vocational Training Record
17. VPP Record
18. Health, Yoga and Physical Education Record
19. SUPW Record
20. Subject Practical Record
21. Work Experience Record
22. Remedial Teaching Record
23. Gurukula Record

III Psychological Experiments

1. Tachistoscope- Span of Attention
2. Tweezer Dexterity-Interest and Aptitude
3. Illusion Board-Illusion
4. Card Sorting Tray-Transfer of Learning
5. Bhatia's Battery- Intelligence
6. Mirror Drawing Apparatus- Learning
7. Vygotsky's 22 Wodden Block- Concept Formation
8. Wallace-Kohan-Creativity Test
9. Happiness Inventory
10. Eyesenk Personality Test
11. Teacher Aptitude Test
12. Job Satisfaction
13. Interest Inventory

Examination

Semester examinations will be held twice in a year

A. Theory- End Semester Exams
B. Practical- It will be conducted in the final year

Evaluation

The Rules and regulations Of Choice Based Credit System (CBCS) are applicable to evaluation

OBE Elements: Bachelor of Education (B.Ed)

Programme Educational Objectives (PEO)

PEO 1:	Promote capabilities to become a secondary school teacher.
PEO 2:	Integrate content knowledge (Mathematics, Science and Languages) and pedagogical knowledge with professional studies (Teacher Education) and provide a good foundation to the prospective teachers
PEO 3:	Develop mastery of the subject content along with needed teaching skills
PEO 4:	Provide excellence in the field of teacher education resulting in quality teachers
PEO 5:	Inculcate Gandhian values and principles for the sustainable rural development
PEO 6:	Promote capabilities by inculcating national values and goals mentioned in the constitution of India

Programme Outcomes (PO)

The POs are the statements that describe what the students graduating from any of the educational programmes should be able to do.

PO 1:	Acquire knowledge and skills in ***Teacher Education*** and apply the teaching competence according to the needs of the Employer/Institution / Society
PO 2:	Gain pedagogical and technological skills in the area of ***Teaching –Learning.***
PO 3:	Inculcate the values of community living and nation building initiatives among school students
PO 4:	Succeed as a teacher through team work, ethical values, positive attitude and commitment in teaching profession
PO 5:	Demonstrate ICT knowledge and skills in facilitating learning process and evaluate learning outcomes
PO 6:	Utilize the student centred teaching methods to maximize achievement in school subjects
PO 7:	Demonstrate communicative skills, problem solving skills and critical thinking skills among the school students
PO 8:	Analyse problems and challenges in teaching learning and provide remedial measures

Note: PO1, PO2 and PO3 can be common to all the departments. The respective department can add the rest.

Programme Specific Outcomes (PSO)

The PSOs are the statements that describe what the graduates of a specific educational programme should be able to do.

Graduates will be able to:

PSO 1:	Apply pedagogical and content knowledge in the domain of ***Teaching Learning*** to emerge as successful teachers
PSO 2:	Predict and solve the complex problems in **Teaching, Learning** and **Evaluation**
PSO 3:	Execute teaching competence to transact school curriculum successfully in the classrooms
PSO 4:	Implement innovative teaching and evaluation strategies for optimizing learning among students
PSO 5:	Formulate the curricular and co-curricular activities based on the individual differences of the students
PSO 6:	Prepare themselves as a lifelong learners to excel in teaching profession

Note: PSO3: Here the distinctiveness of the Department/Programme can be brought in. That is, by incorporating a unit/module/a course or any other component(s), in a unique way, into the curriculum (Teaching, Learning and Evaluation), the Department can give an edge to its graduates in the competitive environment.

21EDNU0101: EDUCATION IN CONTEMPORARY INDIA

Semester	: I	Course Code	: 21EDNU0101
Course Title	: Education in Contemporary India		
No. of Credits	: 04	No. of contact hours per Week	: 04
New Course/Revised Course	: Revised	If revised, Percentage of Revision effected (Minimum20%)	:20%
Category	**:** Core		
Scope of the Course	1. Basic skill 2. Value added course in teacher education field 3. Employability		
Cognitive Levels addressed by the Course	: K-1 (Remember) K-2 (Understand) K-3 (Apply) K-4 (Analyze) K-5 (Evaluate) K-6 (Create)		

Course Objectives

The Course aims to

- know our educational heritage and policy frameworks of India.
- explore the thoughts and contributions of Indian and Western Educational thinkers.
- develop awareness on social diversity and constitutional values.
- know the quality concerns, planning and financing in education
- understand the global concerns of education and environment.

Unit	Content	No. of Hours
I	**Educational Heritage and Policy Frameworks** Education in India- Education in pre independent and post independent periods -Salient features of Vedic, Buddhist, Jain, Islamic and Christianity system of education – Characteristics of Basic education and its relevance to the present-day context - New Education Policy (1986) - Programme of Action (1992)- Sachar Committee (2005) - Salient features of National Curriculum Framework (2005)- National Knowledge Commission (2005)- Guidelines of NPE 2020.	**13**
II	**Educational Thoughts and Contribution** Educational thoughts and contribution of Indian Philosophers: iruvalluvar - Rabindranath Tagore - Vivekananda, Mahathma Gandhi- Aurobindo Ghosh- J.Krishnamoorthi and A.P.J Abdul Kalam -Western Philosophers- Plato - Rousseau – Dewey - Frobel – Montessori - Ivan Illich.	**12**
III	**Social Diversity and Indian Constitutional Values in Education** Social diversity: Meaning and definition - Levels of social diversity: Individual, regional, linguistic, religious, caste and tribes. Preamble of the constitution - Fundamental rights and duties of citizens - Directive principles of State policy and education - Challenges to fulfill the constitutional obligations: freedom, justice, equality, fraternity and education – RTE Act-2009.	**13**
IV	**Quality Concerns in Education Planning** Quality concerns in Education-Employability-distance education and open learning systems. Emerging trends in Education: ABL, ALM, SALM and CCE. Five year plans: Educational policy making and budgeting - Funding systems of education: Public, fees, students' loans, education cess and external aids.	**13**
V	**Global Concerns in Education** Education for social justice, communal conflict management and racism. National and International understanding. Culture- meaning, definition, transmission and transformation of culture. Impact of globalization. Liberalization and privatization on education - life-long learning and online education. Environmental concerns: Global-local. Education for environmental conservation and regeneration.	**13**

Text Books

1. Sharma R.N., Sharma R.K. (2012) History of Education in India, Atlantic Publishers, New Delhi.
2. Singaravelu G. (2012), Education in the Emerging Indian Society, Neel Kamal Publications, New Delhi.

Reference Books

3. Anand, C.L, et al, (1993). Teacher and Education in the Emerging Indian Society, New Delhi: NCERT.
4. Chaube. S.P, Akhilesh Chaube, (2002). Western Educational Thinkers, Concept Publishing Company, New Delhi.
5. Patak, R.P.(2007). Education in the Emerging India, Atlantic Publishers&Distributors(Pvt) Ltd, New Delhi.

e-Resources

1. https://anandakumarknatarajan.blogspot.com/
2. https://www.bdu.ac.in/cde/docs/ebooks/BEd/I/CONTEMPORARY%20INDIA%20AND%20EDUCATION.pdf
3. https://www.bdu.ac.in/cde/docs/ebooks/BEd/II/KNOWLEDGE%20AND%20CURRICULUM.pdf

Course Outcomes

On completion of the course, students should be able to do

CO: 1 apply the educational heritage and policy recommendations of education in teaching-learning.
CO: 2 adopt the Indian and western philosophies in teaching-learning.
CO: 3 explain the social diversity and constitutional values.
CO: 4 use innovative methods of teaching
CO: 5 adapt the impacts of liberalization, privatization and globalization in Education

Mapping of COs with PSOs:

PSO / CO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	**Average**
CO1	3	2	3	2	3	2	**2.5**
CO2	2	2	3	2	2	2	**2.2**
CO3	3	2	3	3	3	2	**2.7**
CO4	3	3	2	2	3	1	**2.3**
CO5	2	3	2	3	2	3	**2.5**
Average	**2.6**	**2.4**	**2.6**	**2.4**	**2.6**	**2**	**2.4**

21EDNU0102: CHILDHOOD AND GROWING UP

Semester	: I	Course Code	: 21 EDNU0102
Course Title	: Childhood and Growing Up		
No. of Credits	: 04	No. of contact hours per Week	: 04
New Course/Revised Course	: Revised	If revised, Percentage of Revision effected (Minimum20%)	:21%
Category	**:** Core		
Scope of the Course	1. Life Skills 2. Psychological Skills 3. Value-Added Courses imparting transferable and life skills		
Cognitive Levels addressed by the Course	• K-1:(Remember) • K-2:(Understand) • K-3:(Apply) • K-4:(Analyze) • K-5:(Evaluate) • K-6:(Create)		

Course Objectives

The Course aims to

- develop an understanding on Psychology of childhood.
- acquaint with the various theories on growth and development of the learner.
- familiarize with the concept of motivation and Learning.
- understand importance of Intelligence and Creativity.
- orient on the personality and mental health.

Unit	Content	No. of Hours
I	**Educational Psychology and Childhood** Psychology: Definition, Concept, Scope of Psychology - Branches of Psychology - Educational Psychology: Definition, Meaning and principles - Stages of development: Infancy, childhood and adolescence and their dimensions of development: Physical, Cognitive, Moral, Emotional and Social - Family, schools, and community with relation to child development, Significance of Educational Psychology to the teacher.	**13**
II	**Growth and Development** Human Growth and Development: Concept, Principles, Characteristics, Distinction among Growth, Development and Maturation - Theories of child development: Erickson Psycho Social Theory, Kohlberg's stages of Moral development, Piaget theory of Cognitive development, Vygotsky socio-cultural approach to cognitive development, Bronfenbrenner Ecological system theory.	**12**
III	**Motivation and Learning** Motivation: Meaning, Definition, Types of Motivation, Factors influencing Motivation, Theories of Motivation, Maslow's hierarchy of Needs, Importance - Learning: Meaning, Definition, Types-Trial and Error learning, Classical Conditioning, Operant Conditioning ,Gestalt Theory – Theories: Cognitive theory of Development, Psychosocial Theory, Theory of Moral Development, Theory of Emotional Development, Transfer of Learning, Remembering and Forgetting.	**13**
IV	**Intelligence and Creativity** Intelligence: Concept, Nature, Theories of Intelligence, Assessment of Intelligence, Multiple Intelligences – Emotional Intelligence. Creativity: Meaning, Definition, Process of Creativity, Factors foster creativity in children, Assessment of creativity.	**13**
V	**Personality and Mental Health** Personality: Meaning, Definitions, Concept - Theories of Personality: Assessment of Personality, Integrated Personality - Mental Health and Mental hygiene: Definition, Characteristics, Teachers Role in promoting Mental health and Mental hygiene	**13**

Text Books

1. Devaki,N.(2015), Psychopedagogy, Shanlax Publications, Madurai.
2. Dandapani, S. (2007), A text book of Advanced educational Psychology: Anmol Publications Pvt Ltd, New Delhi.

Reference Books

3. Chauhan S.S, (2005). Advanced Educational Psychology 7th edition, vikas publishers house Pvt Ltd, Noida.
4. Bert Laura. E. (2014). *Child development*. New Delhi: PHI Learning.
5. Hurlock, Elizabeth. B. (1980). *Development Psychology.* New Delhi: McGraw Hill Education.

e-Resources

1. https://library.honolulu.hawaii.edu/education
2. https://clix.tiss.edu

Course Outcomes

On completion of the course, students should be able to do

CO1: develop an understanding on Psychology of childhood.
CO2: classify growth and development of a child.
CO3: apply concept of motivation and Learning in teaching
CO4: understand the importance of Intelligence and Creativity.
CO5: develop personality and mental health of students.

Mapping of COs with PSOs:

PSO / CO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	**Average**
CO1	3	2	3	2	3	2	**2.5**
CO2	2	3	3	2	3	2	**2.5**
CO3	3	2	2	3	3	2	**2.5**
CO4	3	3	2	2	3	3	**2.7**
CO5	2	3	3	3	2	3	**2.7**
Average	**2.6**	**2.6**	**2.6**	**2.4**	**2.8**	**2.4**	**2.6**

21EDNU0103: BASICS OF TEACHING AND LEARNING

Semester	: I	Course Code	: 21 EDNU0103
Course Title	: Basics of Teaching and Learning		
No. of Credits	: 04	No. of contact hours per Week	: 04
New Course/Revised Course	: Revised	If revised, Percentage of Revision effected (Minimum20%)	:20%
Category	**:** Core		
Scope of the Course	1. Basic Skill 2. Field Placement/Field Project Internship		
Cognitive Levels addressed by the Course	• K-1:(Remember) • K-2:(Understand) • K-3:(Apply) • K-4:(Analyze) • K-5:(Evaluate)		

Course Objectives

The Course aims to

- acquaint with basic concepts of teaching and its components.
- develop an understanding of learning and its components.
- critically analyse teaching as a profession.
- gain knowledge and skills in different teaching methods.
- familiarize with the important concepts of evaluation in teaching - learning.

Unit	Content	No. of Hours
I	**Teaching** Teaching: Concept, Meaning, Definition, Nature, Phases, Principles, Characteristics of Good teaching. Reflective teaching: concept, Meaning and strategies, Theories of teaching – Levels of Teaching.	**13**
II	**Learning** Learning: Concept, Meaning, Definition, Nature, Goals, Characteristics, Types. – Principles- Significance of learning. Factors influencing learning. Teaching and Learning: Relationship. Theories of Learning	**13**
III	**Teaching Profession** Profession: Meaning, definition, characteristics. - Teaching as Profession: Characteristics and Professional traits and ethics, Teacher Appraisal and accountability. Effective teacher: Qualifications, Qualities, Duties and Responsibilities. - Training of teachers: Pre-service and In-service.	**13**
IV	**Teaching Methods** Teaching Methods: Meaning, definition, characteristics, Factors – Selection of Teaching Methods. Various Teaching methods: Lecture, Demonstration, Discussion, Project, Assignment, Seminar, Brainstorming, Team Teaching, Computer Assisted Instruction.	**13**
V	**Evaluation of Teaching and Learning** Evaluation: Concept, Meaning, Definition, Aims. – Types of evaluation: Formative and Summative – Tests: Achievement and Diagnostic - Norm Referenced and Criterion Referenced Tests. Teacher evaluation: Need, significance, competency, efficiency and effectiveness. - Tools: Observation, checklist, maintaining records.	**12**

Text Books

1. Mangal.S.K, (2012). Essentials of Teaching-Learning and Information Technology. Ludhiana: Tandon Pub.
2. Mahesh Kumar, (2013). Modern teaching of Information Technology, Anmol Publication Pvt.Ltd, New Delhi.

Reference Books

3. Saxena.V.K, (2010). Technology of teaching and essentials of teaching learning, Anmol Publication Pvt. Ltd, Delhi.
4. Nayak.A.K and Rao.V.K, (2011). Classroom Teaching Methods and Practices, APH Publishing Corporation. New Delhi.
5. Bhattacharya S, (1996). Foundation of Education, Atlantic Publishers, Delhi.

e-Resources

1. https://pcer.ac.in/wp-content/uploads/2018/04/Learning-and-Teaching.pdf
2. https://www.oecd.org/education/school/48727127.pdf
3. http://mooc.nios.ac.in/mooc/pluginfile.php?file=/11943/course/summary/UNIT3-METHODS_OF_LEARNING_AND.pdf

Course Outcomes

On completion of the course, students should be able to do

CO1:use the components of teaching in school internship.
CO2: explain the concept of learning and relationship between Teaching and learning.
CO3: exhibit the professional qualities of a teacher.
CO4: identify and use a variety of teaching methods during school internship.
CO5: apply various evaluation techniques during school internship.

Mapping of COs with PSOs:

PSO / CO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	**Average**
CO1	3	3	3	3	2	2	**2.7**
CO2	3	2	3	3	2	3	**2.7**
CO3	3	2	3	3	2	2	**2.5**
CO4	3	3	3	3	2	2	**2.7**
CO5	3	2	3	3	2	2	**2.5**
Average	**3**	**2.4**	**3**	**3**	**2**	**2.2**	**2.6**

21EDNU 01D1: ASSESSMENT AND EVALUATION

Semester	: I	Course Code	: 21 EDNU01D1
Course Title	: Assessment and Evaluation		
No. of Credits	: 04	No. of contact hours per Week	: 04
New Course/Revised Course	: Revised	If revised, Percentage of Revision effected (Minimum20%)	:20%
Category	**:** Elective		
Scope of the Course	1. Employability 2. Skill Development		
Cognitive Levels addressed by the Course	• K-1:(Remember) • K-2:(Understand) • K-3:(Apply) • K-4:(Analyze) • K-5:(Evaluate) • K-6 (Create)		

Course Objectives

The Course aims to make prospective teachers

- grasp the basic principles of Educational Assessment
- acquaint with concepts of Educational Evaluation
- develop skills and competencies for test construction
- understand the principles of Standardization of Tests
- apply the process of Continuous And Comprehensive Evaluation in education

Unit	Content	No. of Hours
I	**Basics of Assessment** Measurement: Meaning, definition, importance, purpose – educational assessment: meaning, definition, purpose and types: practice based tools & techniques for classroom assessment- observation, self-reporting, anecdotal records and check lists.	**13**
II	**Evaluation in Education** Evaluation: Meaning, concept, importance, and functions - role of evaluation in teaching and learning process - formative and summative evaluation –. trends in educational evaluation: internal assessment, grading, semester system, question bank, computers in evaluation.	**13**
III	**Test Construction** Test: Meaning, definition, importance and characteristics -teacher made test and standardized test - test construction: principles, steps, planning and designing. - preparation of blue print - writing test items: objective types and subjective types - norm reference test (NRT), criterion reference test (CRT).	**13**
IV	**Standardization of Tests** Characteristics of good test: validity, reliability, objectivity, practicability - item analysis: discrimination power, difficulty index and internal consistency - measures of central tendencies and variabilities- graphical representations.	**13**
V	**Continuous and Comprehensive Evaluation (CCE)** Continuous and comprehensive evaluation: aim, objective, functions and characteristics– scholastic areas – co-scholastic areas – recording and reporting of student's achievements – students' feedback mechanism – role of national and state level testing agencies.	**12**

Text Books

1. Nagarajan. K, Research methodology in Education, 2012, Ram Publication, Chennai
2. Ramamanickam, M,(2009), Statistical methods in psychological and Educational Research, New Delhi: Concept publishing company.

Reference Books

1. Cohen, Jay, Ronald et al, 2005, Psychological Testing and Assessment and Introduction to Tests and Measurement, Mayfield publishing Company, California.
2. John W. Best(2008), Research In Education, printice hall of India Pvt.Ltd, New Delhi
3. Rawat, D.S, (2009), Measurement Evaluation and Statistics in Education, New Raj Book Depot, New Delhi.

e-Resources

1. https://www.egyankosh.ac.in/bitstream/123456789/7310/1/Unit-13.pdf
2. https://dera.ioe.ac.uk/7800/1/AssessmentforLearning.pdf
3. https://keydifferences.com/difference-between-assessment-and-evaluation.html

Course Outcomes

On completion of the course, students should be able to do

CO1 grasp the basic principles of educational assessment
CO2 acquaint with concepts of educational evaluation
CO3 develop skills and competencies for test construction
CO4 know the principles of standardization of tests
CO5 understand the process of continuous and comprehensive evaluation.

Mapping of COs with PSOs:

PSO / CO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	**Average**
CO1	3	3	3	3	2	2	**2.7**
CO2	3	2	3	3	2	3	**2.7**
CO3	3	2	3	3	2	2	**2.5**
CO4	3	3	3	3	2	2	**2.7**
CO5	3	2	3	3	2	2	**2.5**
Average	**3**	**2.4**	**3**	**3**	**2**	**2.2**	**2.6**

21EDNU01D2: GUIDANCE AND COUNSELING

Semester	:I	Course Code	: 21 EDNU01D2
Course Title	: Guidance and Counseling		
No. of Credits	: 04	No. of contact hours per Week	: 04
New Course/Revised Course	: Revised	If revised, Percentage of Revision effected (Minimum20%)	:25%
Category	**:** Elective		
Scope of the Course	• Basic Skill/Advanced Skill • Skill Development • Employability • Entrepreneurship		
Cognitive Levels addressed by the Course	• K-1:(Remember) • K-2:(Understand) • K-3:(Apply) • K-4:(Analyze) • K-5:(Evaluate) • K-6 (Create)		

Course Objectives

The Course aims to make prospective teachers

- understand the concept and principles of guidance and counseling
- apprise various guidance and counseling services in schools
- develop skills in rendering guidance and counseling to students
- practice different techniques in guidance programme
- acquaint with the guidance and counseling programme for special groups.

Unit	Content	No. of Hours
I	**Introduction to Guidance** Guidance: Meaning, nature, principles, purpose of guidance - guidance an integral part of education –types of guidance – scope and functions of educational, vocational, personal, and social guidance. group guidance: need, significance and principles – organizing group guidance activities in educational institution.	**13**
II	**Principles and Practice of Counseling** Counseling: Meaning, definition, nature and principles of counseling. phases of counseling process approaches to counseling: directive, non - directive, eclectic - characteristics, role and functions of counselor - counseling areas, professional preparation of counselor - teacher as a counselor.	**12**
III	**Techniques in Guidance** Testing techniques: Types of tests used in guidance - tests of intelligence, aptitude, interest, achievement and personality – strengths and limitations of testing techniques in guidance - non-testing techniques: observation, interview, anecdotal record, cumulative record, and case study.	**13**
IV	**Educational Guidance Services** Types of school guidance programme- orientation service, occupational information service, follow up service and placement service- remedial services and role of the counselor-evaluation of guidance programme – need, steps and methods of evaluation.	**13**
V	**Guidance for Inclusive Population** Guidance for gifted and slow learners - differently abled children including orthopedic impairment-visually disabled-person with hearing and speech impairment-maladjusted and juvenile delinquents. recent trends of research in guidance and counseling in India.	**13**

Text Books

1. Sharma R.A (2009), Fundamentals of Guidance & Counseling, Lall Book Depot, Meerut.
2. Ram Nath Sharma, Rachana Sharma (2007), Guidance and Counseling in India, Atlantic Publishers &Distributors(p)LTD, New Delhi

Reference Books

3. Chauhan S.S, Principles and techniques of guidance, Vikas publishing house PVT LTD
4. Crow & Crow, (1992), An introduction to Guidance, Eurasia Publishing House, ND.
5. Freeman E.S, (1995), Theory and Practice of Psychological Testing, ND: Henry Holt.

e-Resources

1. https://www.youtube.com/watch?v=T6gTX08fpIM
2. https://www.youtube.com/watch?v=_MtOGjQkPXE)
3. https://www.youtube.com/channel/UCCUr096WDp86n62CXBeHlQw – Vidya-Mitra
4. http://drselvaa.blogspot.com/

Course Outcomes

On completion of the course, students should be able to do

CO1: appraise the concept and principles of guidance and counseling
CO2: organize school guidance and counseling service
CO3: develop skills in rendering guidance and counseling to students
CO4: practice different techniques in Guidance programme
CO5: acquaint with the guidance and counseling programme for special groups.

Mapping of COs with PSOs:

PSO / CO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	**Average**
CO1	2	3	3	3	3	2	**2.7**
CO2	2	3	3	3	3	2	**2.7**
CO3	3	3	3	3	3	3	**3**
CO4	2	3	3	3	3	3	**2.8**
CO5	3	3	3	3	3	2	**2.8**
Average	**2.4**	**3**	**3**	**3**	**3**	**2.4**	**2.8**

21EDNU01D3: HEALTH AND YOGA EDUCATION

Semester	: I	Course Code	: 21 EDNU01D3
Course Title	: Health and Yoga Education		
No. of Credits	: 04	No. of contact hours per Week	: 04
New Course/Revised Course	: Revised	If revised, Percentage of Revision effected (Minimum20%)	:25%
Category	**:** Elective		
Scope of the Course	• Basic Skill/Advanced Skill • Skill Development • Value added and life skills		
Cognitive Levels addressed by the Course	• K-1:(Remember) • K-2:(Understand) • K-3:(Apply) • K-5:(Evaluate)		

Course Objectives

The Course aims to make prospective teachers

- orient on health and physical education and understand the importance and relationship between them.
- recognze ideas on physical fitness components and its importance.
- to identify the methods of administrating the physical education programmes in schools.
- evaluate the physical fitness components and sports talent in students.
- understand the principles of health education safety education and its importance.

Unit	Content	No. of Hours
I	**Introduction to Physical Education and Fitness** Physical Education: Meaning and definition - Objectives - scope - need and importance - Implications - Aim and Objectives - Foundations of Physical Education: Olympic movements-Physical Fitness: General and Health related components - Physical Activities: Stretching -Aerobic - Anaerobic - Development of Physical - Cognitive - Neuromuscular - Affective - Social - Emotional - Spiritual and Recreational. Physiological Effects of Exercise - Growth and development – Brain and Physical activities.	**13**
II	**Physical Education Programmes in Schools** Physical Education programmes: Objectives - Methods of teaching physical activities - Competitions: Intramural and Extramural Competitions–Types of tournaments - Drawing of Fixtures - Annual sports Meet: role - values - limitations. - Basic Games Rules and Specifications: Hockey - Kabaddi, Kho-Kho, Volleyball – Badminton - Minor games – World beater'stalent spotting scheme - Assessing battery test.	**12**
III	**Concept of Health and Hygienic Practices** Health: Need and importance - role of International health Organizations (WHO, UNICEF), Principles -cause of ill health - Food and Nutrition – Balanced diet - Obesity management - risk factors of cardiac diseases. Diseases: Communicable Diseases - Infectious Diseases - Deficiency Diseases -National Health Portal (NHP). Personal Hygiene: cleanliness – Mental Health – Counseling against use of artificial stimulants (Alcohol, Smoking and drugs) – Antidoping - Safety Education: First Aid - injuries - symptoms - care and treatment.	**13**
IV	**Planning and Practice in Health Education** Health Education: need and importance - scope - health Services – importance with reference to rural schools – Swachh Bharath mission, School health Education: Curriculum Planning, - Principles -methods of imparting- Health Instruction - health supervision -health Appraisal -health guidance and counseling - teacher's role and responsibilities.	**13**
V	**Yoga and Meditation** Yoga: meaning - definition - need and importance - schools of yoga - eight limbs of yoga - difference between yoga and physical exercise - principles of healthy living - general guidelines for practicing asanas - Cultural asanas - Meditative asanas –	**13**

	Relaxative asanas, Pranayama - Mudras – Introduction to Bandhas and Kriyas-preventive and curative effects of asanas, Meditation: meaning - definition, types of meditation: santhi - mantra - object – Gandhianway of meditation/silent meditation, Effect of yogic practices: circulatory - respiratory - muscular - nervous systems.	

Text Books

1. Grace Nirmala. D.& Dr.T.Krishnammal. T. (2007), *Physical Education and Health Education*, Priyakamal Publication.
2. Chandrasekaran, (1999), *Sound Health through Yoga*, Madurai: PremKalyan Publications, Sedipatti.

Reference Books

3. Ravi saxena, (2005) *Health And Physical Education*, Anmol Publications Pvt Lts., New Delhi, 2005.
4. NCTE (2015) *Yoga Education* Bachelor of EducationProgramme.New Delhi.

e-Resources

1. https://ncert.nic.in/pdf/publication/otherpublications/iehped101.pdf
2. http://www.tnteu.ac.in/pdf/yoga.pdf
3. https://www.bdu.ac.in/cde/docs/ebooks/B-Ed/II/HEALTH%20AND%20PHYSICAL%20EDUCATION.pdf
4. https://in.pinterest.com/pin/744853225868112348/
5. https://www.dimensions.com/collection/sports-fields-sports-courts
6. https://www.arvindguptatoys.com/arvindgupta/vsosports.pdf
7. https://www.worldbadminton.com/rules/documents/20190106_rulesBooklet.pdf

Course Outcomes

On completion of the course, B.Ed student teacher will

CO1: develops dimensional ideas in health and physical education and recognize physical fitness components

CO2: able to carry out and coordinate planning and administrating physical education programs and curriculum.

CO3: evaluates physical fitness components and identify talented sports performance among school students

CO4: organizes health practice structure in schools and classify health problems and skilled in monitoring fitness and wellness.

CO5: demonstrate yogic practices for healthy living in schools.

Mapping of COs with PSOs:

PSO / CO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	**Average**
CO1	3	3	2	2	1	2	**2.2**
CO2	2	3	2	2	2	2	**2.2**
CO3	2	2	2	3	2	1	**2**
CO4	2	3	2	3	1	2	**2.2**
CO5	1	1	3	1	1	2	**1.5**
Average	**2**	**2.4**	**2.2**	**2.2**	**1.4**	**1.8**	**2**

21EDNU01O1: TEACHING OF LANGUAGE ENGLISH – I

Semester	I	Course Code	21EDNU01O1
Course Title	Teaching of Language English - I		
No. of Credits	04	No. of Contact Hours per Week	4 Hours
New Course / Revised Course	Revised Course	If revised, % of revision effected	20%
Category	Optional - I		
Scope of the Course	1. Employability 2. Basic Skill		
Cognitive Levels addressed by the course	: K-1 (Remember) K-2 (Understand) K-3 (Apply) K-4 (Analyze) K-5 (Evaluate)		

Course Objectives:

The Course aims to make B.Ed. Trainees

- know about basic concepts of Language learning.
- critically analyze different Approaches, Methods of Second Language Teaching
- improve competency in the teaching of Prose, Poem and Vocabulary.
- develop skills in teaching of Grammar, Composition and Supplementary reader.
- orient with various evaluation techniques of Language Teaching.

Course Content:

Unit	Content	No. of Hours
I	**Language Education** Language: Concept, meaning, definition, nature, function and importance - language teaching: principles, aims and objectives of teaching English - first language acquisition - second language learning - three language formula as in NEP 2020 – language as a skill subject –language skill: LSRW - The rationale for learning English - CIIL, CIEFL, RIE in strengthening language education – promotion of Indian languages said in NEP 2020.	13
II	**Approaches and Methods of Second Language Teaching** Approaches: Meaning and definition. structural, situational, communicative approaches - methods: grammar, translation method, direct, bilingual, Dr. West new method, Play-way, Pinsleur language learning method, Silent way and Suggestopedia - difference between approaches and methods - micro teaching skills.	12
III	**Teaching of Prose, Poem and Vocabulary** Prose: Meaning, characteristics, objectives, types, steps of teaching prose - poem: meaning, characteristics, principles, aims, steps of teaching poem. figures of speech: meaning, rhyme, alliteration and pun, simile and metaphor - difference between teaching of prose and poem - vocabulary: types of vocabulary, expansion of vocabulary, selection and grading vocabulary, strategies to develop vocabulary – word formation.	13
IV	**Teaching of Grammar, Composition and Supplementary Reader** Grammar: Definition, characteristics, types, principles, objective and methods of teaching grammar -composition: meaning, objectives, principles, types of compositions: controlled- guided- free - methods of teaching composition -supplementary reader: meaning, characteristics, objectives and methods of teaching.	13
V	**Evaluation of Language Learning** Evaluation: Definition, concept, need and importance, types of evaluation: formative, summative -tools of evaluation: diagnostic test, prognostic test, aptitude test, proficiency test, achievement test, oral tests, written tests - blue print: meaning, definition and construction -question bank - NTA.	13

Text Books:

1. EvangelinArulsevi, (2012). Teaching of special English, Tamil Nadu Teacher Education University, Gowtra Agencies, Chennai.
2. Devaki, N. (2016). English Language Pedagogy. Delhi: Kalpaz Publications.

Reference Books:

3. Adrian Doff, (2004). *Teach English: Cambridge teacher training and development*, Cambridge: Cambridge University press.
4. Begum Jahitha, A. (2010). *English Language Education*, Neelkamal Publications, Hyderabad.
5. Billows.F.L, (2001). *The techniques of Language teaching*, Longman, London.
6. Mowla sheikh, prabakarRao, sarojini (2012). Methods of Teaching English, Neekamal Publications Pvt. Ltd. New Delhi, Hyderabad.
7. Nawale, Deepti and Garg, Sheenam (2014).Teaching Techniques in English. New Delhi: Pacific Books International.

E-Resources:

1. https://www.ebookbou.edu.bd/Books/Text/SOE/BEd/edbn1412/edbn_1412.pdf
2. https://www.slideshare.net/SyahJohar/first-language-acquisition-62215199
3. https://www.slideshare.net/imamshof/methods-oflanguageteaching-52836085
4. http://assets.vmou.ac.in/BED111.pdf
5. https://www.academia.edu/27158440/TOOLS_and_TECHNIQUES_FOR_CLASSROOM_ASSESSMENT
6. https://ddceutkal.ac.in/Syllabus/MA_Education/Education_Paper_5_ENGLISH.pdf

Course Outcomes:

On completion of the course, students should be able to do

CO1 describe the basic concepts of Language learning.
CO2 apply different Approaches, Methods of Second Language Teaching
CO3 utilize the competency in teaching Prose, Poem and Vocabulary.
CO4 apply the skills of teaching in Grammar, Composition and Supplementary reader
CO5 evaluate the language learning of the students

Mapping of COs with PSOs:

PSO / CO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	**Average**
CO1	3	2	3	3	2	2	**2.5**
CO2	3	2	3	3	2	2	**2.5**
CO3	3	3	3	3	3	3	**3**
CO4	3	3	3	3	3	3	**3**
CO5	3	3	3	3	3	2	**2.8**
Average	**3**	**2.6**	**3**	**3**	**2.6**	**2.4**	**2.8**

21EDNU01O2: TEACHING OF LANGUAGE TAMIL – I

Semester	I	Course Code	21EDNU 01O2
Course Title	Teaching of Language Tamil – I		
No. of Credits	04	No. of Contact Hours per Week	4 Hours
New Course / Revised Course	Revised Course	If revised, % of revision effected	20%
Category	• Optional - I		
Scope of the Course	• Basic Skill/Advanced Skill • Skill Development • Employability		
Cognitive Levels addressed by the course	•K-1:(Remember) •K-2:(Understand) •K-3:(Apply) •K-4:(Analyze) •K-5:(Evaluate) • K-6:(Create)		

Course Objectives:

The Course aims to B.Ed student teacher

- nkho tuyhwW gzGfis mwjy
- jhankho fwggjy gyNtW gawW Kiwfis mwarnrajy
- nraAs› ciueil kwWk ,yffz ghlqfsYss fwgjjy jwdfis tshjjy.
- Jizgghlk kwWk gyNtW tifahd flLiug ghlqfSffhd fwgjjy Kiwfis NtWgLjj mwarnrajy
- jko nkho fwggjy kjggly d Elgqfis gadgLjJjy.

Course Content:

Unit	Content	No. of Hours
I	**nkho mwKfk** nkho: nghUs› tiuaiw› Nehffqfs› gadfs› gzGfs. nkhoj Njhwwf nfhsiffs: nkhoad tshrr - vOjJUthffk - GJikahffk - fiyrnrhwfs. juht l nkhofs. tllhu nkhofs: fis nkhofs - tlfF fisnkho – kjjaf fisnkho – NkwF fisnkho – njwF fisnkho - r%f fisnkho – njhoyrhh rwgG tofFfs. jhankho: tiuaiw› Nehffqfs› gadfs› fyt Vwghlby jhankho ngWk ,lk.	12
II	**jhankho gawW Kiw** rqffhy gawWKiw: FUFyKiw› nrhwnghoT› ciuahly› tdhtil gawr› nelLU Kiw. etd Kiwfs: tisahlL Kiw› ebgG Kiw› jdg gawr› Nkwghhit gbgG Kiw› nrayjll Kiw› thTiu Kiw› fsMaTKiw› tuyhwW Kiw› jllklLf fwwy. GSkd tifghL: nghJ Nehffqfs› rwgG Nehffqfs. tiffs: mwT gFj c zuT gFj cs ,affg gFjEz ziyf fwgjjy jwdfs.	13
III	**nraAs› ciueil kwWk ,yffzk fwgjjy** nraAs: nghUs› tiuaiw› Nehffqfs› fwgfFk Kiw kwWk toKiwfs. nraAseak ghuhlly. ciueil: nghUs› tiuaiw› Nehffqfs› fwgfFk Kiw› nraAs - ciueil NtWghLs. ,yffzk: tsffk› tiuaiw› fwgjjy Nehffqfs› gawW Kiw: tjtUKiw› tj tsff Kiw› tisahlL Kiway ,yffzk fwgjjy.	13
IV	**Jizgghlk› flLiu kwWk nkhongaHgG fwgjjy** Jizgghlk: tiuaiw› fwgjjy Nehffqfs› fwgjjy Kiw. flLiug ghlk: fwgjjy Nehffqfs› fwgjjy Kiwfs. tiffs: thofif tuyhwWf flLiu› tUzidf flLiu› tthjfflLiu› tuyhwWf flLiu› MaTf flLiu› ciuahly flLiu. (foeiy› cauei y› Nkyeiy› tFgGfSfFuad). nkhongaHgG: tsffk› tiuaiw› Nehffqfs› gadfs› gw nkhofsyUeJ jhankhoay nkhongaHgG› jhankhoayUeJ gw nkhofsy nkhongaHgG› nkhongahgghy vOk rffyfs› nkhongaHgG tiffs.	13
V	**kjggL** kjggLjy: tsffk› tiuaiw› gadfs› Kiwfs: cwWNehffyKiw› thofif JZfFggjNtL› ahuvdCfjjyKiw› FwggLglbayKiw› Neufhzy Kiw. NjuTfs: juggLjjgngwwNjuTfs› eyyNjuTfs ewgzGfs:	13

	ekgfjjdik› VwGilik› Gwtagghl› vs‰ikgghl› gadghl› Fiwaw‰rNrhjid› Fiwju Nrhjidfs. jk‰oy milTjNjuT jahu‰jjy: gbfs - j‰llgglk - t‰dhjjhs - t‰dhfNflly‰d ,dw‰aikahik› t‰dTjy Nehffqfs› gadfs› t‰dTk Kiwfs› r‰wej t‰dhffs‰d r‰wgg‰ayGfs.	

Text Books

1. fiyrnryt‰. nt. (2009) jk‰o ga‰wwy Elgqfs rQrt‰ ggs‰rH]><NuhL.
2. Kidth. Q. god‰NtY (2006) nrejk‰o fwg‰fFk Kiwfs› maah e‰iyak› jQrhT‹h.

Reference Books

3. Nt ZNfhghy ,. gh. (1991) igejk‰o fwg‰fFk Kiwfs› rFejyh nts‰aL› NtY}H.
4. fzgj‰. t‰. (1997) ewwk‰o fwg‰fFk Kiwfs› rhejh ggs‰rH]› nrdid.
5. Nt ZNfhghy ,. gh rhejFkhh‰ (1991) nghJjjk‰o fwg‰jjy › rFejyh nts‰aL› NtY}H.

e-Resources

1. https://youtu.be/CQ9sHTxkjLk - GSkpd; tifghL:
2. https://youtu.be/jifQAzX4QJY - Ez;zpiyf; fw;gpj;jy;
3. https://youtu.be/EKtwypt9t4E- tpisahl;L Kiwapy; fw;gpj;jy;.

Course Outcomes

On completion of the course, students should be able to do

CO1: nkho‰a‰d Njhwwk kwWk tuyhwW gzGfis t‰sff KbAk.

CO2: jhankho‰ fwg‰ggj‰y rh‰ahd ga‰wW Kiwfis njh‰T nraJ gadgLjj KbAk.

CO3: nraAs› ciueil kwWk ,yffz ghlqfSffhd rh‰ahd ga‰wW Kiwfis njh‰T nraJ gadgLjj KbAk.

CO4: Jizgghlk kwWk gyNtW tifahd flLiug ghlqfSffhd fwg‰jjy KiwfisNtWgLjj‰ mw‰aKbAk.

CO5: jk‰o nkho‰ fwg‰ggj‰y rh‰ahd kj‰gglyd Elgqfis gadgLjj KbAk.

Mapping of COs with PSOs:

PSO / CO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	**Average**
CO1	3	3	2	2	3	2	**2.7**
CO2	3	2	2	2	3	2	**2.8**
CO3	2	3	3	2	2	2	**2.8**
CO4	3	3	2	3	2	3	**2.7**
CO5	3	3	3	2	3	2	**2.8**
Average	**3**	**3**	**2.8**	**3**	**2.8**	**2**	**2.8**

21EDNU01O3: TEACHING OF MATHEMATICS - I

Semester	: I	Course Code	: 21EDNU01O3
Course Title	: Teaching of Mathematics-I		
No. of Credits	: 04	No. of contact hours per Week	: 04
New Course/Revised Course	: Revised	If revised, Percentage of Revision effected (Minimum20%)	:30%
Category	**:** Optional-I		
Scope of the Course	• Basic Skill • Skill Development • Employability		
Cognitive Levels addressed by the Course	• K-1:(Remember) • K-2:(Understand) • K-3:(Apply) • K-4:(Analyze) • K-5:(Evaluate) • K-6 (Create)		

Course Objectives

The Course aims to make B.Ed trainees

- acquire knowledge about the nature and scope of mathematics
- understand the objectives of teaching mathematics
- develop competency in structuring lesson plans.
- apply the different methods and techniques of teaching mathematics.
- know the various evaluation procedures in learning mathematics.

Unit	Content	No. of Hours
I	**Nature and Scope of Mathematics** Mathematics: Meaning, definitions, and its importance- characteristics of mathematics:logical sequence, structure, precision, abstractness, symbolism – values of mathematics- relationship with other disciplines –developments of notions and number system- contribution of eminent mathematicians: Ramanujam, Aryabhatta, Euler, Gauss.	**13**
II	**Objectives of Teaching Mathematics** Aims and objectives of teaching mathematics- taxonomy of educational objectives - objectives of teaching mathematics at primary, secondary and higher secondary levels – objectives of cognitive process in revised Bloom's taxonomy- objectives of teaching Mathematics with reference to NCF 2005 and NCFTE 2009- mathematical aspects mentioned in NEP 2020 - Instructional Vs Behavioural objectives of teaching Mathematics.	**13**
III	**Lesson Planning** Developing year plans, unit plans, lesson plans - lesson planning: meaning, definition and importance - basic steps in lesson planning - Herbation steps: writing and analysis of lesson plans- teaching skills - micro and macro teaching skills for mathematics.	**13**
IV	**Methods of Teaching Mathematics** Pedagogy: meaning, need and types –pedagogical analysis in mathematics- analytic and synthetic, induction and deduction, lecture method -project method- heuristic approach – laboratory method- dalton plan – problem solving method- techniques of teaching mathematics: group discussion, seminar, team teaching, cooperative learning, supervised study, programmed instruction, computer aided instruction	**13**
V	**Evaluation In Mathematics Teaching** Evaluation: Definition, need, importance - tests and its types: criterion and norm referenced tests –formative and summative evaluation- prognostic test -diagnostic testing and remedial teaching - principles of good mathematics test - construction of standardized achievement test in mathematics: blue print and question bank- item analysis:reliability, validity.	**12**

Text Books

1. Aruljothi, (2013). Teaching of Mathematics – I, Centum Press, New Delhi.
2. Kulbir Singh Sidhu, (2012). The Teaching of Mathematics, New Delhi: Sterling Publications.

Reference Books

3. Aggarwal, J.C. (2008). Teaching of Mathematics. UP: Vikas Publishing House Pvt Ltd.
4. Anice, J.(2005). Teaching of Mathematics. Hyderabad: Neelkamal Publication Pvt.Ltd
5. Servas, W., Varga, T., (1995). Teaching School Mathematics, UNESCO.

E-Resources

4. https://ncert.nic.in/pdf/focus-group/math.pdf
5. https://egyankosh.ac.in/bitstream/123456789/46785/1/Unit-2.pdf
6. https://egyankosh.ac.in/bitstream/123456789/6691/1/Unit-4.pdf
7. http://www.wbnsou.ac.in/online_services/SLM/BED/A4_Part-II_Unit_1-5.pdf

Course Outcomes

On completion of the course, students should be able to do

CO1 acquire knowledge of the nature and scope of mathematics
CO2 understand the objectives of teaching mathematics
CO3 develop effective instructional skills and competency in structuring lesson plans.
CO4 apply the different methods and techniques of teaching mathematics.
CO5 know the various evaluation procedures

Mapping of COs with PSOs:

PSO / CO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	**Average**
CO1	3	3	3	2	3	2	**2.7**
CO2	3	3	3	3	3	2	**2.8**
CO3	3	3	3	3	3	3	**3**
CO4	3	3	3	3	3	3	**3**
CO5	3	3	3	2	3	3	**2.8**
Average	**3**	**3**	**3**	**2.6**	**3**	**2.6**	**2.9**

21EDNU01O4: TEACHING OF PHYSICAL SCIENCE - I

Semester	: I	Course Code	: 21EDNU01O4
Course Title	: Teaching of Physical Science-I		
No. of Credits	: 04	No. of contact hours per Week	: 04
New Course/Revised Course	: Revised	If revised, Percentage of Revision effected (Minimum20%)	:20%
Category	**:** Optional-I		
Scope of the Course	• Skill Development • Employability • Field Placement/Field Project Internship		
Cognitive Levels addressed by the Course	• K-1:(Remember) • K-2:(Understand) • K-3:(Apply) • K-4:(Analyze) • K-5:(Evaluate)		

Course Objectives

The Course aims to make B.Ed trainees

- learn the nature and scope of Physical Science.
- understand the objectives of teaching Physical Science.
- gain the skill of writing and analyzing lesson plans.
- practice various methods of teaching Physical Science.

identify various evaluation procedure in physical science teaching.

Unit	Content	No. of Hours
I	**Nature of Physical Science** Science: Meaning, definition and nature of science - importance of science - scientific method - development of scientific attitude and temper - Physical Science: related areas of knowledge - inter disciplinary approach -Impact of Physical Science on modern communities. - Physical Science for : environment, health, peace, equity and society - contribution of eminent scientists — Isaac Newton, Dalton, Neils Bohr, De Broglie, J. C. Bose, C. V. Raman, Albert Einstein, etc.	**13**
II	**Objectives of Teaching Physical Science** Bases for the formulation and functions of objectives – criteria for the selection of objectives - Bloom's Taxonomy - Instructional Vs Behavioral objectives - objectives and values of teaching Physical Science at primary, secondary and higher secondary levels - objectives of teaching science with reference to NCF 2005, NCFTE 2009 and NEP 2020.	**13**
III	**Lesson Planning** Teaching skills: Micro and macro teaching skills for physical science. - introduction to year plan, unit plan, lesson plan. - lesson planning: meaning, definition, importance, steps, types and format - lesson plans: principles and importance - Herbartian steps - writing and analysis of lesson plans.	**13**
IV	**Methods of Teaching Physical Science** General methods of teaching Physical Science: scientific method, induction & deduction, lecture method -lecture cum demonstration method - project method- heuristic approach – laboratory method - historical and biographical approaches, Dalton Plan - modern methods of teaching Physical Science: group discussion, panel discussion, simulation, seminar, workshop, team teaching - cooperative learning, supervised study, programmed instruction, computer aided instruction, personalized system of instruction.	**12**
V	**Evaluation in Physical Science Teaching** Evaluation: Definition, need, importance. - tests and its types: criterion and norm referenced tests – formative and summative evaluation - prognostic test - diagnostic testing and remedial teaching. - principles and criteria of good test - construction of standardized achievement test in physical science: blue print and question bank - item analysis- reliability, validity.	**13**

Text Books

1. Panner Selvam, A., (2013), Rajendran.Teaching of Physical Science, Shantha Publishers.Chennai.
2. Sivarajan K. (2012), Trends and developments in Modern Educational Practices Calicut University.

Reference Books

3. Gupta S.K.(2012), Teaching of Physical Science in Secondary Schools, sterling
4. Publications.
5. Nair, C.P.S, (2010), Teaching of Science in our Schools, Sulthan Chand & Co ltd.
6. Radha Mohan (2011), Teaching of Physical Science, Neelkamal Publications PVT. LTD, Hyderabad.

E-Resources

1. https://ncert.nic.in/desm/pdf/phy_sci_partI.pdf
2. https://ncert.nic.in/desm/pdf/phy_sci_PartII.pdf
3. http://www.tnteu.ac.in/pdf/phy.pdf
4. http://www.bdu.ac.in/cde/docs/ebooks/B-Ed/I/TEACHING%20OF%20SCIENCE.pdf
5. http://rajanachen.com/wp-content/uploads/2017/06/Teaching-All-pages.pdf

Course Outcomes

On completion of the course, students should be able to do

CO1: utilize the knowledge of Physical Science in day-to-day life.

CO2: write the instructional objectives for teaching Physical science at Secondary school level.

CO3: write lesson plans for Physical Science at secondary school level.

CO4: identify and use a variety of teaching methods for teaching Physical Science at secondary school level.

CO5: apply various evaluation techniques for teaching-learning of Physical Science at secondary school level.

Mapping of COs with PSOs:

PSO / CO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	**Average**
CO1	3	3	2	3	2	2	**2.5**
CO2	3	3	3	3	2	3	**2.8**
CO3	3	2	3	3	2	3	**2.7**
CO4	3	2	3	3	2	3	**2.7**
CO5	3	2	3	3	2	3	**2.7**
Average	**3**	**2.4**	**2.8**	**3**	**2**	**2.8**	**2.7**

21EDNU01O5: TEACHING OF BIOLOGICAL SCIENCE - I

Semester	: I	Course Code	: 21EDNU01O5
Course Title	: Teaching of Biological Science-I		
No. of Credits	: 04	No. of contact hours per Week	: 04
New Course/Revised Course	: Revised	If revised, Percentage of Revision effected (Minimum20%)	:20%
Category	**:** Optional-I		
Scope of the Course	• Skill Development • Employability • Field Placement/Field Project Internship		
Cognitive Levels addressed by the Course	• K-1:(Remember) • K-2:(Understand) • K-3:(Apply) • K-4:(Analyze) • K-5:(Evaluate)		

Course Objectives

The Course aims to make B.Ed trainees

- learn the nature and scope of Biological Science.
- understand the objectives of teaching Biological Science.
- gain the skill of writing and analyzing lesson plans.
- practice various methods of teaching Biological Science.
- know the various evaluation procedures in Biological Science teaching.

Unit	Content	No. of Hours
I	**Nature of Biological Science** Science: Meaning, definition and nature of science - product and a body of knowledge - a way of investigation – a way of thinking. Scientific attitude and temper. Biological science*:* meaning-related areas of knowledge - inter disciplinary approach-impact of biological science on modern communities.	**13**
II	**Objectives of Teaching Biological Science** Objectives of teaching Biological Science: Bloom's Taxonomy. - objectives and values of teaching biological science at primary, secondary and higher secondary levels - objectives of teaching Biological Science - Instructional Vs Behavioural objectives of teaching Biological Science.	**12**
III	**Lesson Planning** Developing year plans, unit plans, lesson plans - lesson planning: meaning, definition, importance, steps, types and format - principles of lesson planning - lesson plans - their importance - writing and analysis of lesson plans - science process skills and micro and macro teaching skills for Biological Science.	**13**
IV	**Methods of Teaching Biological Science** General methods of teaching Biological Science: scientific method, induction and deduction, lecture method - lecture cum demonstration method – project method - heuristic approach – laboratory method - historical and biographical approaches, Dalton Plan - modern methods of teaching Biological Science: group discussion, panel discussion, simulation, seminar, workshop, team teaching, cooperative learning, supervised study, programmed instruction, computer aided instruction, and personalized system of instruction	**13**
V	**Evaluation in Biological Science Teaching** Evaluation: Definition, need, importance - tests and its types: criterion and norm referenced tests – formative and summative evaluation - prognostic test -diagnostic testing and remedial teaching - principles of good science test- construction of standardized achievement test in biological science: blue print and question bank - item analysis: reliability, validity.	**13**

Text Books

1. Ameetha. P, Kamakshi. J &Srinivas. K. (2014). Methods of Teaching Biological Science, Neelkamal Publications, New Delhi.
2. Gupta S.K. (2012.), Teaching of Biological Science in Secondary Schools, Sterling Publications.

Reference Books

3. PannerSelvam, A, (2013), Rajendran.k*Teaching of Physical Science, Shantha Publishers*. Chennai.
4. Sharma, Y.K. (2003). Teaching of Physical Science, Kanishka Publishers, New Delhi.
5. Zaidi, S.M. (2004). Mmodern Teaching of Life Sciences, Anmol Publications, New Delhi.

E-Resources

1. http://graduatecollege.ac.in/studymaterial/Nature%20and%20scope%20of%20biology.pdf
2. https://snscourseware.org/drsnsce/files/1567575987.pdf
3. https://www.youtube.com/watch?v=RSq9MVmXNcY
4. https://www.slideshare.net/Vijirayar/methods-of-teaching-biological-science
5. https://www.nap.edu/read/5287/chapter/6#37

Course Outcomes

On completion of the course, students should be able to do

CO1: utilze the knowledge of biological science in day-today life.
CO2: explain and write the instructional objectives for teaching Biology at secondary school level.
CO3: write lesson plans for Biology at secondary school level.
CO4 : identify and use a variety of teaching methods for teaching Biology at secondary school level.
CO5: apply various evaluation techniques for teaching-learning of Biology at secondary school level.

Mapping of COs with PSOs:

PSO / CO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	**Average**
CO1	3	3	2	3	2	2	**2.5**
CO2	3	3	3	3	2	3	**2.8**
CO3	3	2	3	3	2	3	**2.7**
CO4	3	2	3	3	2	3	**2.7**
CO5	3	2	3	3	2	3	**2.7**
Average	**3**	**2.4**	**2.8**	**3**	**2**	**2.8**	**2.7**

21EDNU01O6: TEACHING OF ENGLISH EDUCATION – I

Semester	I	Course Code	21EDNU01O6
Course Title	**TEACHING OF ENGLISH EDUCATION - I**		
No. of Credits	04	No. of Contact Hours per Week	4 Hours
New Course / Revised Course	Revised Course	If revised, % of revision effected	20%
Category	Optional - II		
Scope of the Course	1. Employability 2. Basic Skill		
Cognitive Levels addressed by the course	: K-1 (Remember) K-2 (Understand) K-3 (Apply) K-4 (Analyze) K-5 (Evaluate)		

Course Objectives:

The Course aims B.Ed. Teacher Training to

- identify the role of English Language Education in India.
- familiarize with speech sounds of English Language.
- acquaint with meaning and concepts of English Language Curriculum.
- understand the principles of Communicative Language Teaching.
- orient with the procedure of English Text book analysis.

Course Content:

UNIT	CONTENT	HOURS
I	**INTRODUCTION TO ENGLISH LANGUAGE** The status of English in India - Aims of teaching English at Elementary, Secondary and Higher Secondary level - Objectives of teaching English as a second language - Teaching English as skill subject - Learning mother tongue vs second language learning - Contribution psychology to teaching of English - The Scope of B.Ed. English Course, Experiential Language Learning (NEP -2020: 22.7) – Promotion of Indian Languages (NEP – 2020: 22).	12
II	**PHONETICS AND FLUENCY IN ENGLISH LANGUAGE** Element of English Language: Phonology, Morphology, Grammar - Phonetics: Meaning, Phoneme – Vowels - Consonants – Diphthongs - Speech organs and their Roles - Phonetic transcription – Syllabification – Stress – Intonation – Rhythm - Use of convention formulae: Greeting, Apology, Invitation, Refusal, Accepting, Thanking.	13
III	**ENGLISH LANGUAGE CURRICULUM** English Language Curriculum: Meaning, Definition, Principles of curriculum construction, Difference between syllabus and curriculum, Curriculum Designing: Types – Limitation in the existing English Language Curriculum – Guidelines by NCF (2005, 2009) on English Language Curriculum.	13
IV	**COMMUNICATIVE LANGUAGE TEACHING** Communication: Meaning, Definition, Types, Barriers and Significance – Communicative approaches: Meaning, Principles, Procedures, Merits and Demerits - Dyadic Communication: Face to face conversation, Telephonic Conversation, Interview - CLT: Meaning, Definition, Concept - Communicative tasks and activities: Extempore speech, Role play, Drama, Quiz, Elocution, Language games.	13
V	**ENGLISH TEXT BOOK ANALYSIS** Text Book Analysis: Meaning, Definition, Concept, Need and Significance. Analysis criteria: Cover page, Content, Pictures, Illustration, Number of pages, Assignments, Follow-up work, Language, Level of vocabulary, Grammar, Competencies - Analysis of VI to VIII std English text books.	13

Text Books:

1. Devaki, N. (2016). English Language Pedagogy. Delhi: Kalpaz Publications.
2. Nanda, K. (1989). Developing English Comprehension, Sterling Publishers, New Delhi.

3. Shaila Mahan, (2013). Teaching Englsih Communicatively, Principles, Practices and Perspectives Y king Books, Jaipur.

Reference Books:

1. Begum Jahitha, A. (2007). Enhancing *Communicative Competence*. Agra. Bhargava Book House.
2. David Nunan (2010) Research methods in Language Learning Cambridge University press.
3. Evangelin Arulsevi, (2012). Teaching of special English, Tamil Nadu Teacher Education University, Gowtra Agencies, Chennai.
4. Mowla sheikh, prabakar Rao, sarojini (2012). Methods of Teaching English, Neekamal Publications Pvt. Ltd. New Delhi, Hyderabad.
5. Prakash, Nita and Sinha, Kamala (2014). Advanced English Language Teaching, New Delhi: Pacific Books International.

E-Resources:

1. http://www.manuu.ac.in/DDE-SelfLearnmaterial/BEDD116DST_July4.pdf
2. https://www.slideshare.net/victoriadebord37/elements-of-language
3. https://www.slideshare.net/RaniRaj5/aims-and-objectives-of-teaching-english
4. https://www.slideshare.net/melvin1007/phonetics-powerpoint
5. https://www.powershow.com/viewht/495c65MDgxM/ELT_CURRICULUM_powerpoint_ppt_presentation
6. https://www.slideshare.net/sergemaister/communicative-language-teaching-15255081
7. https://slideplayer.com/slide/13608664/

Course Outcomes:

On completion of the course, students should be able to do

CO1 understand the English Language.
CO2 familiarize with speech sounds.
CO3 develop English Language Curriculum.
CO4 apply Communicative Language Teaching.
CO5 analyze English Text books.

Mapping of COs with PSOs:

PSO / CO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	**Average**
CO1	2	3	2	3	2	3	2.5
CO2	3	3	2	2	3	2	2.5
CO3	2	1	2	3	3	2	2.17
CO4	3	1	3	2	2	2	2.17
CO5	2	2	3	2	2	1	2
Average	2.4	2	2.4	2.4	2.4	2	2.27

21EDNU 01O7: TEACHING OF TAMIL EDUCATION – I

Semester	First	Course Code	21EDNU 01O7
Course Title	**TEACHING OF TAMIL EDUCATION – I**		
No. of Credits	04	No. of contact hours per Week	04
New Course/Revised Course	Revised Course	If revised, Percentage of Revision effected (Minimum20%)	20%
Category	Optional – II		
Scope of the Course (may be more than one)	• Basic Skill/Advanced Skill • Skill Development • Employability		

Cognitive Levels addressed by the Course	• K-1:(Remember) • K-2:(Understand) • K-3:(Apply) • K-4:(Analyze) • K-5:(Evaluate) • K-6:(Create)
Course Objectives	The Course aims to • jk;o nkho;Njhwwk kwWk tshrr; gww; t;sfFjy. • jk;o vOjJffs;d g;wgG kwWk xy;fs;d g;wgG Kiwfis gww; mw;jy. • jk;o nkho; ghljj;wfhd fiyjj;llk cUthfFjy gww;a nfhsiffis mw;arnrajy. • ciuahlyfSffid j;wdfis tshjjy. • jk;o nkho; ghlgnghUs;d jdikfis NtWgLjj; mw;jy

UNIT	CONTENT	No .of Hours
I	**myF- 1 jk;o nkho; mw;Kfk:** jk;o nkho;: gzGfs› nkho;jNjhwwk› nfhsiffs› nkho;a;d tsurr;e;iy› nkho;tuyhW› jk;o tu;tbt tuyhW› vOjJ ruj;Ujjk. f;isnkho; nfhsiffs› NgrR nkho; vOjJ nkho; jk;o nkho;a;d jd;jjdikfs. nrknkho;a;d gzGfs.	12
II	**myF- 2. nkho;a;ay NfhlghLfs** xy;: nghUs› xy; nkho;ahjy› vOjJffs;d g;wgG› jk;o xy;fs;d g;wgG. edDhyhh nfhsiffs› nkho;a;ayhu nfhsiffs› nkho;a;d mikgG› xy;ad;ay› cUgd;ay› njhlu;ay› xy;ia MuhAk Kiwfs› NfhlghLfs. ca;nuhy;fs›nkanahy;fs.	13
III	**myF 3. fiyjj;llKk nkho;Ak** fiyjj;llk: tiuaiw› fiyjj;llk cUthfFjy;y r;y mbggilf nfhsiffs› Gj;a Njr;a fyt;f nfhsiffs› fyt;a;d Nehffk› gss;f fiyjj;lljj;wFk Njr;af fyt; Fw;fNfhSfFKss njhluG› fiyjj;lljj;y jhankho;a;d ,lk› Njr;af fyt;f nfhsifa;y fiyffyt;.	13
IV	**myF 4. ciuahly to; nkho; fwg;jjy** ciuahly: nghUs› tiuaiw› Nehffqfs› gadfs› ciuahly ga;wr;a;id gyNtW e;iyfs;y msg;ggjwfhd Kiwfs› jiygGfisg gww; ciuahly› fijnrhyYjy› fyeJiuahly› nrhwNghu› nrhwngho;Tfs› ehlfk› Neufhzy. ehlfk: NjhwwKk tsurr;Ak. ehlf tifgghL› ,ffhy ehlfqfs› vOjJ ehlfqfs› tllhunkho; ehlqfs› nraAis ehlfkhff;f fwg;jjy.	13
V	**myF 5.ghlgnghUs MaT** 6 Mk tFgG Kjy 9Mk tFgG tiuAss nkho;gghl Ehyfs gww; MaT	13
References	Text Books 1. Nt Z Nfhghy ,. gh rhejFkhh; (1991) nghJjjk;o fwg;jjy › rFejyh nts;aL›NtY}H. kdhlr; Rejuk (2013) ghlgnghUs kwWk jk;o fwg;jjy (nghJj jk;o)› fhtakhyh ggs;ru];› j;zLffy. 2. j z lghd;. R (2013) jk;o fwg;jjy› kdh gj;ggfk› kJiu. 3. K i d t h. Q. god;NtY (2006) nrejk;o fwg;fFk Kiwfs› maah e;iyak› jQrhT›h. 4. f i y r n r y t;. n t. (2009) jk;o ga;wwy Elgqfs rQrt; ggs;NH];›<NuhL.	

Course Outcomes	On completion of the course, students should be able to do CO1: jkpo nkhopNjhwwk kwWk tshrrp gwwp tpsffp $wKbAk. CO2: jkpo vOjJffspd gpwgG kwWk xypfspd gpwgG Kiwfis NtWgLjjp mwpaKbAk CO3: jkpo nkhop ghljjpwfhd fiyjjpllk cUthfFjy gwwpa nfhsiffis tpsffKbAk. CO4: gyNtW tifahd ciuahlyfSffhd jpwdfis gadgLjj KbAk CO5: jkpo nkhop ghlgnghUis NtWgLjjp mwpa KbAk.

Mapping of COs with PSOs:

PSO / CO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	**Average**
CO1	2	3	2	3	2	3	2.5
CO2	3	3	2	2	3	2	2.5
CO3	2	1	2	3	3	2	2.17
CO4	3	1	3	2	2	2	2.17
CO5	2	2	3	2	2	1	2
Average	2.4	2	2.4	2.4	2.4	2	2.27

21EDNU01O8: TEACHING OF MATHEMATICS EDUCATION - I

Semester	: I	Course Code	: 21EDNU01O8
Course Title	: Teaching of Mathematics Education -I		
No. of Credits	: 04	No. of contact hours per Week	: 04
New Course/Revised Course	: Revised	If revised, Percentage of Revision effected (Minimum20%)	:30%
Category	**:** Optional-I		
Scope of the Course	• Basic Skill • Skill Development • Employability		
Cognitive Levels addressed by the Course	• K-1:(Remember) • K-2:(Understand) • K-3:(Apply) • K-4:(Analyze) • K-5:(Evaluate) • K-6 (Create)		

Course Objectives

The Course aims to make B.Ed trainees

- acquire knowledge about the nature and scope of mathematics
- understand the objectives of teaching mathematics
- develop competency in structuring lesson plans.
- apply the different methods and techniques of teaching mathematics.
- know the various evaluation procedures in learning mathematics.

Unit	Content	No. of Hours
I	**Nature and Scope of Mathematics** Mathematics: Meaning, definitions, and its importance- characteristics of mathematics:logical sequence, structure, precision, abstractness, symbolism – values of mathematics- relationship with other disciplines –developments of notions and number system- contribution of eminent mathematicians: Ramanujam, Aryabhatta, Euler, Gauss.	**13**
II	**Objectives of Teaching Mathematics** Aims and objectives of teaching mathematics- taxonomy of educational objectives - objectives of teaching mathematics at primary, secondary and higher secondary levels – objectives of cognitive process in revised Bloom's taxonomy- objectives of teaching Mathematics with reference to NCF 2005 and NCFTE 2009- mathematical aspects mentioned in NEP 2020 - Instructional Vs Behavioural objectives of teaching Mathematics.	**13**
III	**Lesson Planning** Developing year plans, unit plans, lesson plans - lesson planning: meaning, definition and importance - basic steps in lesson planning - Herbation steps: writing and analysis of lesson plans- teaching skills - micro and macro teaching skills for mathematics.	**13**
IV	**Methods of Teaching Mathematics** Pedagogy: meaning, need and types –pedagogical analysis in mathematics- analytic and synthetic, induction and deduction, lecture method -project method- heuristic approach – laboratory method- dalton plan – problem solving method- techniques of teaching mathematics: group discussion, seminar, team teaching, cooperative learning, supervised study, programmed instruction, computer aided instruction	**13**
V	**Evaluation In Mathematics Teaching** Evaluation: Definition, need, importance - tests and its types: criterion and norm referenced tests –formative and summative evaluation- prognostic test -diagnostic testing and remedial teaching - principles of good mathematics test - construction of standardized achievement test in mathematics: blue print and question bank- item analysis:reliability, validity.	**12**

Text Books

1.Aruljothi, (2013). Teaching of Mathematics – I, Centum Press, New Delhi.

2.Kulbir Singh Sidhu, (2012). The Teaching of Mathematics, New Delhi: Sterling Publications.

Reference Books

3. Aggarwal, J.C. (2008). Teaching of Mathematics. UP: Vikas Publishing House Pvt Ltd.
4. Anice, J.(2005). Teaching of Mathematics. Hyderabad: Neelkamal Publication Pvt.Ltd
5. Servas, W., Varga, T., (1995). Teaching School Mathematics, UNESCO.

E-Resources

1. https://ncert.nic.in/pdf/focus-group/math.pdf
2. https://egyankosh.ac.in/bitstream/123456789/46785/1/Unit-2.pdf
3. https://egyankosh.ac.in/bitstream/123456789/6691/1/Unit-4.pdf
4. http://www.wbnsou.ac.in/online_services/SLM/BED/A4_Part-II_Unit_1-5.pdf

Course Outcomes

On completion of the course, students should be able to do

CO1 acquire knowledge of the nature and scope of mathematics
CO2 understand the objectives of teaching mathematics
CO3 develop effective instructional skills and competency in structuring lesson plans.
CO 4 apply the different methods and techniques of teaching mathematics.
CO 5 know the various evaluation procedures.

Mapping of COs with PSOs:

PSO / CO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	**Average**
CO1	3	3	3	2	3	2	**2.7**
CO2	3	3	3	3	3	2	**2.8**
CO3	3	3	3	3	3	3	**3**
CO4	3	3	3	3	3	3	**3**
CO5	3	3	3	2	3	3	**2.8**
Average	**3**	**3**	**3**	**2.6**	**3**	**2.6**	**2.9**

21EDNU01O9: TEACHING OF PHYSICAL SCIENCE EDUCATION - I

Semester	: I	Course Code	: 21EDNU01O9
Course Title	: Teaching of Physical Science Education -I		
No. of Credits	: 04	No. of contact hours per Week	: 04
New Course/Revised Course	: Revised	If revised, Percentage of Revision effected (Minimum20%)	:20%
Category	**:** Optional-I		
Scope of the Course	• Skill Development • Employability • Field Placement/Field Project Internship		
Cognitive Levels addressed by the Course	• K-1:(Remember) • K-2:(Understand) • K-3:(Apply) • K-4:(Analyze) • K-5:(Evaluate)		

Course Objectives

The Course aims to make B.Ed trainees

- learn the nature and scope of Physical Science.
- understand the objectives of teaching Physical Science.
- gain the skill of writing and analyzing lesson plans.
- practice various methods of teaching Physical Science.

identify various evaluation procedure in physical science teaching.

Unit	Content	No. of Hours
I	**Nature of Physical Science** Science: Meaning, definition and nature of science - importance of science - scientific method - development of scientific attitude and temper - Physical Science: related areas of knowledge - inter disciplinary approach -Impact of Physical Science on modern communities. - Physical Science for : environment, health, peace, equity and society - contribution of eminent scientists — Isaac Newton, Dalton, Neils Bohr, De Broglie, J. C. Bose, C. V. Raman, Albert Einstein, etc.	**13**
II	**Objectives of Teaching Physical Science** Bases for the formulation and functions of objectives – criteria for the selection of objectives - Bloom's Taxonomy - Instructional Vs Behavioral objectives - objectives and values of teaching Physical Science at primary, secondary and higher secondary levels - objectives of teaching science with reference to NCF 2005, NCFTE 2009 and NEP 2020.	**13**
III	**Lesson Planning** Teaching skills: Micro and macro teaching skills for physical science. - introduction to year plan, unit plan, lesson plan. - lesson planning: meaning, definition, importance, steps, types and format - lesson plans: principles and importance - Herbartian steps - writing and analysis of lesson plans.	**13**
IV	**Methods of Teaching Physical Science** General methods of teaching Physical Science: scientific method, induction & deduction, lecture method -lecture cum demonstration method - project method- heuristic approach – laboratory method - historical and biographical approaches, Dalton Plan - modern methods of teaching Physical Science: group discussion, panel discussion, simulation, seminar, workshop, team teaching - cooperative learning, supervised study, programmed instruction, computer aided instruction, personalized system of instruction.	**12**
V	**Evaluation in Physical Science Teaching** Evaluation: Definition, need, importance. - tests and its types: criterion and norm referenced tests – formative and summative evaluation - prognostic test - diagnostic testing and remedial teaching. - principles and criteria of good test - construction of standardized achievement test in physical science: blue print and question bank - item analysis- reliability, validity.	**13**

Text Books

1. Panner Selvam, A., (2013), Rajendran.Teaching of Physical Science, Shantha Publishers.Chennai.
2. Sivarajan K. (2012), Trends and developments in Modern Educational Practices Calicut University.

Reference Books

3. Gupta S.K.(2012), Teaching of Physical Science in Secondary Schools, sterling Publications.
4. Nair, C.P.S, (2010), Teaching of Science in our Schools, Sulthan Chand & Co ltd.
5. Radha Mohan (2011), Teaching of Physical Science, Neelkamal Publications PVT. LTD, Hyderabad.

E-Resources

1. https://ncert.nic.in/desm/pdf/phy_sci_partI.pdf
2. https://ncert.nic.in/desm/pdf/phy_sci_PartII.pdf
3. http://www.tnteu.ac.in/pdf/phy.pdf
4. http://www.bdu.ac.in/cde/docs/ebooks/B-Ed/I/TEACHING%20OF%20SCIENCE.pdf
5. http://rajanachen.com/wp-content/uploads/2017/06/Teaching-All-pages.pdf

Course Outcomes

On completion of the course, students should be able to do

CO1: utilize the knowledge of Physical Science in day-to-day life.
CO2: write the instructional objectives for teaching Physical science at Secondary school level.
CO3: write lesson plans for Physical Science at secondary school level.
CO4: identify and use a variety of teaching methods for teaching Physical Science at secondary school level.
CO5: apply various evaluation techniques for teaching-learning of Physical Science at secondary school level.

Mapping of COs with PSOs:

PSO / CO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	**Average**
CO1	3	3	2	3	2	2	**2.5**
CO2	3	3	3	3	2	3	**2.8**
CO3	3	2	3	3	2	3	**2.7**
CO4	3	2	3	3	2	3	**2.7**
CO5	3	2	3	3	2	3	**2.7**
Average	**3**	**2.4**	**2.8**	**3**	**2**	**2.8**	**2.7**

21EDNU01O10: TEACHING OF BIOLOGICAL SCIENCE EDUCATION - I

Semester	: I	Course Coe	: 21EDNU01O10
Course Title	: Teaching of Biological Science Education -I		
No. of Credits	: 04	No. of contact hours per Week	: 04
New Course/Revised Course	: Revised	If revised, Percentage of Revision effected (Minimum20%)	:20%
Category	**:** Optional-I		
Scope of the Course	• Skill Development • Employability • Field Placement/Field Project Internship		
Cognitive Levels addressed by the Course	• K-1:(Remember) • K-2:(Understand) • K-3:(Apply) • K-4:(Analyze) • K-5:(Evaluate)		

Course Objectives

The Course aims to make B.Ed trainees

- learn the nature and scope of Biological Science.
- understand the objectives of teaching Biological Science.
- gain the skill of writing and analyzing lesson plans.
- practice various methods of teaching Biological Science.
- know the various evaluation procedures in Biological Science teaching.

Unit	Content	No. of Hours
I	**Nature of Biological Science** Science: Meaning, definition and nature of science - product and a body of knowledge - a way of investigation – a way of thinking. scientific attitude and temper. biological science:meaning-related areas of knowledge - inter disciplinary approach-impact of biological science on modern communities.	**13**
II	**Objectives of Teaching Biological Science** Objectives of teaching Biological Science: Bloom's Taxonomy. - objectives and values of teaching biological science at primary, secondary and higher secondary levels - objectives of teaching Biological Science - Instructional Vs Behavioural objectives of teaching Biological Science.	**12**
III	**Lesson Planning** Developing year plans, unit plans, lesson plans - lesson planning: meaning, definition, importance, steps, types and format - principles of lesson planning - lesson plans - their importance - writing and analysis of lesson plans - science process skills and micro and macro teaching skills for Biological Science.	**13**
IV	**Methods of Teaching Biological Science** General methods of teaching Biological Science: scientific method, induction and deduction, lecture method - lecture cum demonstration method – project method - heuristic approach – laboratory method - historical and biographical approaches, Dalton Plan - modern methods of teaching Biological Science: group discussion, panel discussion, simulation, seminar, workshop, team teaching, cooperative learning, supervised study, programmed instruction, computer aided instruction, and personalized system of instruction	**13**
V	**Evaluation in Biological Science Teaching** Evaluation: Definition, need, importance - tests and its types: criterion and norm referenced tests – formative and summative evaluation - prognostic test -diagnostic testing and remedial teaching - principles of good science test- construction of standardized achievement test in biological science: blue print and question bank - item analysis: reliability, validity.	**13**

Text Books

1. Ameetha. P, Kamakshi. J &Srinivas. K. (2014). Methods of Teaching Biological Science, Neelkamal Publications, New Delhi.
2. Gupta S.K. (2012.), Teaching of Biological Science in Secondary Schools, Sterling Publications.

Reference Books

3. PannerSelvam, A, (2013), Rajendran.k*Teaching of Physical Science, Shantha Publishers.* Chennai.
4. Sharma, Y.K. (2003). Teaching of Physical Science, Kanishka Publishers, New Delhi.
5. Zaidi, S.M. (2004). Mmodern Teaching of Life Sciences, Anmol Publications, New Delhi.

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1. http://graduatecollege.ac.in/studymaterial/Nature%20and%20scope%20of%20biology.pdf
2. https://snscourseware.org/drsnsce/files/1567575987.pdf
3. https://www.youtube.com/watch?v=RSq9MVmXNcY
4. https://www.slideshare.net/Vijirayar/methods-of-teaching-biological-science
5. https://www.nap.edu/read/5287/chapter/6#37
6.

Course Outcomes

On completion of the course, students should be able to do

CO1: utilize the knowledge of biological science in day-today life.
CO2: explain and write the instructional objectives for teaching Biology at secondary school level.
CO3: write lesson plans for Biology at secondary school level.
CO4 : identify and use a variety of teaching methods for teaching Biology at secondary school level.
CO5: apply various evaluation techniques for teaching-learning of Biology at secondary school level.

Mapping of COs with PSOs:

PSO / CO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	**Average**
CO1	3	3	2	3	2	2	**2.5**
CO2	3	3	3	3	2	3	**2.8**
CO3	3	2	3	3	2	3	**2.7**
CO4	3	2	3	3	2	3	**2.7**
CO5	3	2	3	3	2	3	**2.7**
Average	**3**	**2.4**	**2.8**	**3**	**2**	**2.8**	**2.7**

21EDNU0204: LEARNER AND LEARNING

Semester	: II	Course Code	: 21 EDNU0204
Course Title	: Learner and Learning		
No. of Credits	: 04	No. of contact hours per Week	: 04
New Course/Revised Course	: Revised	If revised, Percentage of Revision effected (Minimum20%)	:20%
Category	**:** Core		
Scope of the Course	• Basic Skill. • Employability. • Entrepreneurship		
Cognitive Levels addressed by the Course	• K-1:(Remember) • K-2:(Understand) • K-3:(Apply) • K-4:(Analyze) • K-5:(Evaluate) • K-6:(Create)		

Course Objectives

The Course aims to make prospective teachers

- become active and creative learners based on the principle of learning and processes.
- understand the different levels of behaviouristic and cognitive strategies.
- acquaint with the concept formation through different techniques.
- identify various influencing factors for learning
- design the constructivist modules of learning for different learners.

Unit	Content	No. of Hours
I	**Learning and Knowledge** Learning: meaning and definition - elements of learning – basic principles of learning and their implications – rote learning vs. meaningful learning – principles and techniques of active learning and their implications – self learning - Aspects of Learning- Various ways of Learning - Cognitive readiness for learning - Learning in and outside the school - knowledge and understanding - Recreating knowledge - Manifesto for learning – foundations of learning - NEP 2020.	**13**
II	**Types, Levels and Approaches to Learning** Types of learning - Learning Hierarchy - Signal learning stimulus - Response learning - Motor and verbal - chain learning - Multiple discriminations concept learning - Learning rules and problem – solving - Learning Levels from imprint to intuition - Examples of learning at different levels. Approaches - Behaviourist - Cognitivist and Constructivist.	**13**
III	**Concepts and Constructs** Concepts and constructs – Concept – Formation - Use of materials activities - scheme pictures - real life experiences - Construct mental representations of external reality - Connecting ideas generated by students due to exposure to peers - media and community - Concept mapping.	**12**
IV	**Factors Contributing to Learning** Personal Psychological – Social - Emotional factors and School related factors - Learning style - teaching strategies – media - technology in Teaching Learning Process - Teacher's personality traits.	**13**
V	**Constructivist Approach to Learning** Learners construct knowledge for themselves - Constructing meaning is learning - Focus on the learner not on the lesson taught - Personal and social construction of meaning - Learning to Learn- Making Meaning - Learning, a social activity – Zone of Proximal Development (ZPD).	**13**

Text Books

1. Mathur S. S. (2001), Educational Psychology, Vinod Pustar Mandir, Agra.
2. Mangal S. K. (2000), An Introduction to Psychology. Prakash Brothers, Ludhiana.

Reference Books

1. Aggarwal J. C. (1996), Essentials of Educational Psychology, Vikas Publishing House Pvt.Ltd, New Delhi.
2. Onyehalu, A.S (1988). Psychological Foundations of Education. Meks-Unique (Nig.) Publishers, Awka.
4. Woolfolk, A., Winne, P. H., & Perry, N. E. (2006). Educational psychology. Toronto: Pearson Allyn and Bacon.

e-Resources

1. https://www.oecd.org/edu/ceri/50300814.pdf
2. http://www.psychologydiscussion.net/learning
3. http://www.edpsy.org/dis/534274.pdf
4. https://ncert.nic.in/pdf/nep//NEP_Ppt.pdf

Course Outcomes

On completion of the course, students should be able to do

CO1: collaborate the active and creative learners based on the principle of learning Andprocesses.
CO2: apply different levels of behaviouristic and cognitive strategies.
CO3: categorize different concept formation through various techniques
CO4: connect the various influencing factors for learning.
CO5: create constructivist Modules

Mapping of COs with PSOs:

PSO / CO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	**Average**
CO1	3	2	3	3	2	3	**2.7**
CO2	3	3	3	2	2	3	**2.7**
CO3	3	2	3	3	2	2	**2.5**
CO4	3	3	3	2	2	3	**2.7**
CO5	3	2	3	3	2	2	**2.5**
Average	**3**	**2.4**	**3**	**2.6**	**2**	**2.6**	**2.6**

21EDNU0205: CRITICAL UNDERSTANDING OF ICT

Semester	: II	Course Code	: 21 EDNU0205
Course Title	: Critical Understanding of ICT		
No. of Credits	: 04	No. of contact hours per Week	: 04
New Course/Revised Course	: Revised	If revised, Percentage of Revision effected (Minimum20%)	:25%
Category	**:** Core		
Scope of the Course	• Basic Skill / Advanced Skill • Skill Development		
Cognitive Levels addressed by the Course	• K-1:(Remember) • K-2:(Understand) • K-3:(Apply) • K-4:(Analyze) • K-5:(Evaluate) • K-6:(Create)		

Course Objectives

The Course aims to make prospective teachers

- acquire the knowledge of educational technology and ICT in education.
- know the various types of individualized instruction.
- develop basic skills to use internet in teaching and learning.
- utilize audio visual aids, multimedia and social media in Education.
- explore the Online Learning and Digital Resources in India.

Unit	Content	No. of Hours
I	**Educational Technology and ICT in Education** Educational Technology: Meaning, Definition, Objectives, Need, Scope, Nature, Components and Limitations- Hardware, Software and System Approach. Information and Communication Technology (ICT): Meaning, Characteristics and challenges- ICT in Education: Need, Objectives and Importance - Major Institutions of Educational Technology in India and UNESCO-ICT Competency Framework for Teachers.	**13**
II	**Individualized Instruction** Individualized Instruction: Concept, Need, Principles and Techniques; Personalized System of Instruction (PSI) - Programmed Learning: Meaning, Definition, Objectives, Characteristics, Principles, Types and Steps. Computer Aided teaching techniques: Computer Assisted Instruction (CAI), Computer Assisted Language Learning (CALL), Computer Managed Learning – Advantages and Role of Teacher.	**13**
III	**Internet and Communication** Internet: Introduction, E-mail, Search Engines, Info-Savvy Skills, Digital Age Skills, Safe Surfing, Internet resources for different disciplines like natural sciences, social sciences, Humanities, and Mathematics; Communication: Meaning, Concept, Types, Elements of Communications, Models of Communication, Barriers of Communication and Factors affecting Communication	**12**
IV	**Audio Visual Media** Media: Meaning, Functions, Types – Selection of Media for Teaching – Learning; Audio Visual Media: Meaning, Purpose, Importance, classification; Multimedia Approach in Educational Technology: Meaning, Elements, Types, Uses, Tools for Creating Multimedia and advantages of Multimedia - Social Networking, Advantages and Demerits.	**13**
V	**Online Learning and Digital Initiatives in India** E-learning: Meaning, categories, Modalities, Characteristics, Advantages and Disadvantages. Online learning: MOOCs, MOODLE, e-LMS, Blended Learning, Flipped Learning, Virtual Classroom teaching and Cloud Computing in Education. Digital Initiatives in India: NME-ICT, Sakshat Portal , SWAYAM, SWAYAM Prabha, National Digital Library, FOSSEE, ePG Pathshala, NPTEL, Spoken Tutorial, Virtual Lab, A-View and eGyankosh.	**13**

Textbooks

1. Sampath.K (1992). *Introduction to Educational Technology*. New Delhi: Sterling Publishers
2. Vanaja,M. and Rajasekar, S. (2010). *Educational Technology & Computer Education*. Hyderabad: Neelkamal Publication.

Reference Books

3. Aggarwal J.C., (2013). *Essentials of Educational Technology*. New Delhi: Vikas Publishing House.
4. Imran, R.Shaikh.(2013). *Introduction to Educational Technology and ICT*. New Delhi: McGraw Hill Education.
5. Mangal.S.K and Uma Mangal.(2012).*Essentials of Educational Technology*. New Delhi: PHI Learning Private Limited.

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1. https://egyankosh.ac.in/
2. https://epgp.inflibnet.ac.in/
3. https://www.swayamprabha.gov.in/
4. https://sitapur2.kvk4.in/img/SEC311-it-elearning-skills.pdf
   https://ncte.gov.in/Website/OER/courses.aspx

Course Outcomes

On completion of the course, students should be able to do

CO1: use ICT in teaching-learning.
CO2: prepare individualized instruction module
CO3: apply the knowledge of Internet and communication for classroom teaching
CO4: identify and use appropriate audio-visual aids for teaching-learning.
CO5: enroll and complete online courses in education.

Mapping of COs with PSOs:

PSO / CO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	**Average**
CO1	3	2	3	3	2	2	**2.5**
CO2	2	2	3	2	2	3	**2.3**
CO3	3	2	3	2	2	2	**2.3**
CO4	3	3	2	2	2	3	**2.5**
CO5	3	2	3	3	2	3	**2.7**
Average	**2.8**	**2.2**	**2.8**	**2.4**	**2**	**2.6**	**2.5**

21EDNU0206: PSYCHO SOCIAL AND PHILOSOPHICAL BASES OF EDUCATION

Semester	: II	Course Code	: 21 EDNU0206
Course Title	: Psycho Social and Philosophical Bases of Education		
No. of Credits	: 04	No. of contact hours per Week	: 04
New Course/Revised Course	: Revised	If revised, Percentage of Revision effected (Minimum20%)	:20%
Category	**:** Core		
Scope of the Course	1. Basic Skill 2. Value added course in teacher education field 3. Employability		
Cognitive Levels addressed by the Course	• K-1 (Remember) • K-2 (Understand) • K-3 (Apply) • K-4 (Analyze) • K-5 (Evaluate)		

Course Objectives

The Course aims to

- know the basic concept of education.
- understand the concept of philosophical bases.
- learn the concept of psychological perspective.
- explore on the concept of sociological basis of education.
- familiarize with the pedagogical concepts and its application in teacher education.

Unit	Content	No. of Hours
I	**Basics of Education** Education: Concept, meaning, definition, characteristics, aims, functions and scope - various forms of education - education as science - education as a social process – education for human resources development.	**12**
II	**Philosophical Bases** Philosophy: Meaning, definition and scope - relationship between education and philosophy - western philosophies – idealism- naturalism- pragmatism- realism and existentialism.	**13**
III	**Psychological Bases** Psychology: Meaning, definition, scope. relationship between education and psychology - educational psychology: meaning, definition, nature and characteristics and scope - concept of growth, development and maturation - individual difference – motivation – group dynamics – mental health and hygiene.	**13**
IV	**Sociological Bases** Sociology: Meaning, definition, characteristics. educational sociology: concept, definition, importance and scope. agencies of education – education for socialization - social change - social mobility - social stratification - school as a social sub system - community schools and colleges - education for social justice, democracy and citizenship.	**13**
V	**Pedagogical Basis** Taxonomy of educational objectives – Benjamin Bloom's classification cognitive, affective and psychomotor domains - teacher and classroom behavior – characteristics of a good teacher behaviour - flanders interaction analysis - role and functions of teachers, as a planner, facilitator, counselor and researcher.	**13**

References

1. Bhattacharya S, (1996). Foundation of Education, Atlantic Publishers, Delhi.
2. Banerjee A.C. & Sharma S.R (1999). Sociological and Philosophical Issues in Education, Book Enclave, Jaipur.
3. Chaube.S.P, Akhilesh Chaube, (2002), *Western Educational Thinkers*, Concept Publishing Company, New Delhi.
4. Dash.B.N, (2000). Teacher and Education in the emerging Indian society, Neelkamal Publications, New Delhi.
5. Hemlata, T. (2002). Sociological Foundation of Education, Kanishka Publisher, New Delhi

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1. https://anandakumarnatarajan72.blogspot.com/
2. https://anandakumarknatarajan.blogspot.com/
3. https://ddceutkal.ac.in/Syllabus/MA_SOCIOLOGY/Paper-16.pdf

Course Outcomes

On completion of the course, students should be able to do

CO1- explain the basic concepts of education.
CO2- adopt the philosophical bases in teaching-learning.
CO3- apply the psychological bases of education in teaching-learning.
CO4 - interpret the social changes and its impact on education
CO5– use the theories of teaching and learning in practice.

Mapping of COs with PSOs:

PSO / CO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	**Average**
CO1	3	3	2	2	1	3	**2.3**
CO2	2	2	2	2	3	2	**2.2**
CO3	2	2	2	2	3	2	**2.2**
CO4	2	2	3	3	3	1	**2.3**
CO5	2	2	1	2	2	3	**2**
Average	**2.2**	**2.2**	**2**	**2.2**	**2.4**	**2.2**	**2.2**

21EDNU02D1: COGNITIVE SCIENCE IN EDUCATION

Semester	: II	Course Code	: 21EDNU02D1
Course Title	: Cognitive Science in Education		
No. of Credits	: 04	No. of contact hours per Week	: 04
New Course/Revised Course	: Revised	If revised, Percentage of Revision effected (Minimum20%)	:20%
Category	**:** Elective		
Scope of the Course	1. Employability 2. Basic Skill		
Cognitive Levels addressed by the Course	• K-1:(Remember) • K-2:(Understand) • K-3:(Apply) • K-4:(Analyze) • K-5:(Evaluate)		

Course Objectives

The Course aims to make prospective teachers

- know the Basics of Cognitive Science
- identify the Brain parts and Learning
- analyze the role of Emotions in Learning
- understand Cognitive Processes in Teaching and Learning
- Familiarize with the approaches and applications of cognitive science in teaching and learning.

Unit	Content	No. of Hours
I	**Basics of Cognitive Science** Cognitive Science: meaning, definition, scope and evolution – branches of cognitive science: cognitive science – cognitive neuropsychology – cognitive neuroscience - cognitive psychology – educational cognitive science: meaning, importance and scope.	**12**
II	**Brain and Learning** Brain and Learning: structure of brain, parts of brain - hemispherity – neurons and types: functions of neurons, types of neurons, neural networks - synapse: synapgenesis, gaining and loosing synapses, brain mapping - brain based teaching: concept, meaning, definition and principles of BBT.	**13**
III	**Cognitive Skills** Cognitive Skills: meaning, definition, brain and cognitive skills - types of cognitive skills: attention, perception, decision making, visual and auditory recognition, reasoning, problem solving and information processing.	**13**
IV	**Neuro Aspects of Learning** Neuro Plasticity: definition -central nervous system - autonomous nervous system - nerous system and learning - neuro transmitters: meaning, definition and role of neuro transmitters in teaching and learning - limbic system and learning.	**13**
V	**Approaches and Applications of Cognitive Science** Fundamental concepts and approaches of cognitive science – application of cognitive science in teaching and learning – role of emotions in learning – cognitive science programs in India – reputed cognitive scientists in india and abroad.	**13**

Text Books

1. Paul Thagard. (2005). Mind Introduction to Cognitive Science. Second Edition – New Delhi: Prentice Hall of India.
2. Begum, Jahitha A. & Subburaman, R. (2017). Cognitive Science. New Delhi: APH Publications.

Reference Books

1. Srinivasan, N., Gupta, A.K., & Pandey, J. (2008). Advances in Cognitive Science: Volume 1. New Delhi: Sage Publications.
2. Srinivasan, N., Kar, B. R., & Pandey, J. (2010) Advances in Cognitive Science: Volume 2. New Delhi: Sage Publications.
3. Stephen K Reed (2007). Cognitive theories and Applications. New Delhi: Pearson Education Dorling Kindersley Publishing.
4. Ronald T Kellog (2007). Fundamentals of Cognitive Psychology. New Delhi: Sage Publications.

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1. https://www.slideshare.net/duttamonasen/15-neuroplasticity-17228288
2. https://www.slideshare.net/damarisb/neurotransmitters-27039224
3. https://www.youtube.com/watch?v=2pRm0m_xQik
4. https://www.youtube.com/watch?v=c9j1hlVQ_-E
5. https://www.youtube.com/watch?v=x37vwau0mTA
6. https://www.youtube.com/watch?v=SSmD5RREqiY
7. https://www.youtube.com/watch?v=LOHKVp8hn7o
8. https://cognitiontoday.com/brain-based-learning-theory-strategies-and-concepts/
9. https://www.sciencedirect.com/topics/psychology/cognitive-ability
10. https://www.worldscientific.com/doi/epdf/10.1142/8747
11. http://www.scholarpedia.org/article/Cognitive_neuropsychology

Course Outcomes

On completion of the course, students should be able to do

CO1: utilize knowledge about basic concepts of Cognitive Science.
CO2: understand the role of brain in learning.
CO3: analyze the role of emotion in learning.
CO4: familiarize in the fundamental concepts of cognitive science.
CO5: utilize the approaches and applications of cognitive science.

Mapping of Cos with PSOs:

PSO / CO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	**Average**
CO1	3	2	3	3	2	3	**2.7**
CO2	2	3	3	2	2	2	**2.3**
CO3	3	2	2	2	2	2	**2.2**
CO4	3	3	3	3	2	3	**2.8**
CO5	3	2	2	3	2	3	**2.5**
Average	**2.8**	**2.4**	**2.6**	**2.6**	**2**	**2.6**	**2.5**

21EDNU02D2: VOCATIONAL EDUCATION AND TRAINING

Semester	: II	Course Code	: 21EDNU02D2
Course Title	: Vocational Education and Training		
No. of Credits	: 04	No. of contact hours per Week	: 04
New Course/Revised Course	: Revised	If revised, Percentage of Revision effected (Minimum20%)	:20%
Category	**:** Elective		
Scope of the Course	• Basic Skill/Advanced Skill • Skill Development • Employability • Entrepreneurship		
Cognitive Levels addressed by the Course	• K-1:(Remember) • K-2:(Understand) • K-3:(Apply) • K-4:(Analyze) • K-6:(Create)		

Course Objectives

The Course aims to make prospective teachers

- make the B.Ed student teachers to gain knowledge and practice skills in vocational education, technical education and training.
- make the students to know the major vocational education courses and curriculum in India.
- make the students to identify the basic scheme in multipurpose schools, SUPW and work experience activities.
- practice the various types administrative methods of vocational training and guidance.
- know the self-employment policy and features of small scale industry.

Unit	Content	No. of Hours
I	**Concept of Vocational and Technical Education** Vocational education: concept – objectives - need and importance - human resources development – dichotomy between academic and vocational education - vocationalization - vocational education and economic development - current scenario - problems in implementation- relation between general - technical and vocational education –technical education in school curriculum.	**12**
II	**Vocational Education at Secondary Stage** Vocational education: course of study - list of vocational courses – syllabus, scheme of examination – training for vocational course teachers - vocational curriculum in nep 2020 - functions of NCVT - national vocational qualification frame work - major areas of technical-vocational education - merits and demerits of vocational education-suggestions for improvement.	**13**
III	**Vocational Programmes** Work Experience: concept – distinction between work experience and vocational education - basic education – concept – merits – criticism, need and importance, scheme of multipurpose schools - S.U.P.W: – concept – objectives – selection of activities programme – types of activities and their advantages.	**13**
IV	**Technical Institutions and Courses** ITI and Polytechnic – need and importance – classification - admission process – course of study – organization and administration at state level – vocational training: administrative methods – guidance and counseling – need and importance-vocational fitness and appraisal-recent trends in technical education.	**13**
V	**Occupational Training** Skill development and training - salient features - co-operation with industries and organizations - vocational training - government schemes - self employment policies small scale village industry: training for self employment - vocational trades: food processing-bakery, handmade paper – textiles - khadi and handloom, cottage industries: – diary – agriculture products – handicrafts – herbal products – painting – construction – leather works.	**13**

Text Books

1. Aggarwal J.C.Aggarwal S.P, (1987), Vocational Education, Doaba House Publishers, New Delhi.
2. Dhirendra Verma, (2001), Administration of Vocational Education, Concept Publication, New Delhi.

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3. Kothari Commission report, (1964-66). Ministry of Education, New Delhi.
4. Govt of India New Delhi (2006). Report of the working group on Skill development and training.

e-Resources

1. https://www.scdl.net/downloads/vocationaluniversityconceptnote.pdf
2. https://www.yogiraj.co.in/importance-or-need-of-vocationalisation
3. https://www.slideshare.net/AnuRadha107/vocational-education-50457715
4. https://www.slideshare.net/mail2paramjeet/vocational-education-in-india-and-challenges
5. https://www.yourarticlelibrary.com/education/aims-and-objectives-of-vocational-education-in-india/45176
6. http://ajeshpk.blogspot.com/2017/04/supw-socially-useful-productive-work_24.html

Course Outcomes

On completion of the course, students should be able to do

CO1: understand the basic concept and ideas of vocational education technical Education and training.
CO2: recognize the various types of vocational curriculum and training courses.
CO3: understand the concept of SUPW and selection of activity programmes and its purposes.
CO4: analyze and adopts the different forms of administrative techniques of vocational training and guidance.
CO5: create ideas and make products and trade by use of the vocational training

Mapping of Cos with PSOs:

PSO / CO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	**Average**
CO1	3	2	3	3	2	3	**2.7**
CO2	2	3	3	2	2	2	**2.3**
CO3	3	2	2	2	2	2	**2.2**
CO4	3	3	3	3	2	3	**2.8**
CO5	3	2	2	3	2	2	**2.3**
Average	**2.8**	**2.4**	**2.6**	**2.6**	**2**	**2.4**	**2.5**

21EDNU02D3: GENDER ISSUES IN EDUCATION

Semester	: II	Course Code	: 21EDNU02D3
Course Title	: Gender Issues in Education		
No. of Credits	: 04	No. of contact hours per Week	: 04
New Course/Revised Course	: Revised	If revised, Percentage of Revision effected (Minimum20%)	:25%
Category	**:** Elective		
Scope of the Course	• Basic Skill/Advanced Skill • Skill Development • Employability		
Cognitive Levels addressed by the Course	• K-1:(Remember) • K-2:(Understand) • K-3:(Apply) • K-4:(Analyze) • K-5:(Evaluate) • K-6:(Create)		

Course Objectives

The Course aims to B.Ed student teachers

- explain the basic concepts of gender and sex.
- acquaint about various policies for gender equality
- diagnose gender identity and discriminations in school
- identify gender role in different aspects of text-books and curriculum
- analyze about sexual harassment and abuse based on gender

UNIT	CONTENT	No. of HOURS
I	**Introduction to Gender Issues** Gender, sex, sexuality, patriarchy, masculinity and feminism – meaning, definition - gender-bias, gender stereotyping and empowerment - reasons for gender inequalities - gender roles in society: family, caste, class, religion, culture, the media and popular culture, law and the state (film, advertisements, songs, etc)	**13**
II	**Gender Studies - Paradigm Shifts** Paradigm shift from women's studies to gender studies. theories on gender and education: application in the indian context - socialization theory - gender difference - structural theory - deconstructive theory - contemporary period: policy initiatives commissions and committees, schemes, programmes and plans for gender equality.	**12**
III	**Gender Identity and Education** Gender identity: meaning, definition - gender identities and socialisation practices in: family, schools, other formal and informal organization - discrimination of gender in classroom interactions, rituals and school/ routines - processes of disciplining techniques for boys and girls - analysis of sex-roles stereotype - schooling of girls: in equalities and resistances (issues of access, retention and exclusion) - girls with disability-doubly discriminated.	**13**
IV	**Gender Issues in Curriculum** Construction of gender in curriculum framework since independence: gender and the hidden curriculum - gender in text and context (textbooks' inter-sectionalist with other disciplines, classroom processes, including pedagogy) - teacher as an agent of change - transgender: providing opportunities for education, employment and life skills – NEP 2020 - developing school curriculum for gender equality.	**13**
V	**Sexual Abuse and Violence** Sexual abuse and violence: role of education in preventing them - body objectification: meaning and concept- role of teachers and parents combating female body objectification - linkages and differences between reproductive rights and sexual rights - sites of conflict: social and emotional agencies perpetuating violence: family, school, work place and media (print and electronic) – importance of addressing cyber crimes.	**13**

Text Books

1. Nirmala Jayaraj, (2001), Women and Society – Lady Doak College Madurai 625002.
2. Indira Kulishreshtha ‘Noopur’ (1989), Women’s Studies in School Education- Sterling Publishers private limited.

Reference Books

1. Ram Shankar Singh, (2009), Encyclopedia on women and children Trafficking –Volume 1 to 3- Anmol Publications.
2. Nalini Mishra, (2008), Woman Laws against Violence and abuse- Pearl Books –New Delhi.
3. Manju Gupta, (2006), Handbook of Women Health - Khel Sahitya Kendra – New Delhi.
4. NEP 2020 Document of Ministry of Education, GoI, New Delhi.

e-Resources

1. https://www.youtube.com/watch?v=XVx8rFU_Xv4
2. http://drselvaa.blogspot.com/
3. https://www.youtube.com/watch?v=mNCgbqoCIgQ
   https://www.youtube.com/c/Vidyamitra/search?query=gender%20issues

Course Outcomes

On completion of the course, students should be able to do

CO1: appraise the basic concepts of gender and sex.
CO2: explain about various policies for gender equality
CO3: diagnose gender identity and discriminations in school
CO4: understand gender issues in different aspects of curriculum
CO5: analyze sexual abuses and violence based on gender

Mapping of Cos with PSOs:

PSO / CO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	**Average**
CO1	2	3	3	3	3	3	**2.8**
CO2	3	3	3	3	3	2	**2.8**
CO3	3	2	3	3	3	3	**2.8**
CO4	3	3	3	3	3	3	**3**
CO5	2	3	3	3	3	2	**2.7**
Average	**2.6**	**2.8**	**3**	**3**	**3**	**2.6**	**2.8**

21EDNU02O1: TEACHING OF LANGUAGE ENGLISH – II

Semester	II	Course Code	21EDNU02O1
Course Title	Teaching of Language English - II		
No. of Credits	04	No. of Contact Hours per Week	4 Hours
New Course / Revised Course	Revised Course	If revised, % of revision effected	20%
Category	Optional - I		
Scope of the Course	1. Employability 2. Basic Skill		
Cognitive Levels addressed by the course	: K-1 (Remember) K-2 (Understand) K-3 (Apply) K-4 (Analyze) K-5 (Evaluate)		

Course Objectives:

The Course aims to make the B.Ed. Trainees to

- know the skill of listening comprehension and speaking
- familiarize to learn reading comprehension and writing skills
- acquire skills on the resources and instructional materials for teaching English.
- improve skills in lesson planning and know about text book in ELT
- orient the students with the recent trends of language Teaching.

Course Content:

Unit	Content	No. of Hours
I	**Listening Comprehension and Speaking Skills** Listening skills: Aims of teaching Listening - sub skills of listening - three phases of listening activities - Problems in teaching listening - Suggestions to improve listening skills - Speaking skills: aims of teaching Speaking - sub skills of speaking, Techniques in teaching speaking: the conversation class, topic based discussion class, Task centred fluency practices - Tasks for developing speaking skill: individual, pair and group work - Improving speaking skills: Parallel sentences, Conversation, Dialogues, Play Reading, Group Discussion, Storytelling, Narration, Description, Games, Debate.	12
II	**Reading Comprehension and Writing Skills** Reading skills: Meaning, Aims, Importance, Stages of Reading, Types of Reading: Skimming, Scanning, intensive and Extensive reading, Loud and Silent reading - Methods of teaching Reading: Alphabet method, Phonetic Method, Word method, Phrase method, Sentence Method - Reading for perception and Comprehension - Strategies to develop oral reading and Silent reading - Writing Skills: Grammatical skills, Judgemental skills, Discourse skills, Mechanical skills - Characteristics of good handwriting - Strategies for developing good handwriting – Note taking – summarizing – Paraphrasing.	13
III	**Resources and Instructional Materials for Teaching of English** Meaning and importance of TLM - Zero Cost and Low cost TLM - Types of Resources (TLM): Audio resources: Audio cassette, Radio broadcast, Tape recorder, Language Laboratory, Linguophone - Visual resources: Black board, charts, pictures, flash cards, models cartoons, OHP - Audio visual resources: Films, videocassettes, computers, T.V- use of websites - Literary Activities: symposium, Declamations - Teacher as a human resource: Qualities, Qualification and professional competencies of English teacher - Creating global teachers: IELTS, TOFEL.	13
IV	**Planning and Text Book in ELT** Revised Bloom's Taxonomy - Lesson plan: meaning, aims, importance, characteristics, steps, and advantages of lesson plan - Model lesson plan for prose, poetry, grammar, composition – Remedial Teaching - Text Books: Meaning. Definition, importance and characteristics of good text book - Reference material - Work book.	13
V	**Recent Trends in Language Teaching** Computer Assisted Language Learning (CALL) - Community Language Learning (CLL) - Total Physical Response (TPR) - Task Based Language Teaching (TBLT) - English for	13

	Specific Purpose (ESP) - English for Academic Purpose (EAP) - ABL Method - Active Learning Method(ALM) - Mind Mapping Method (MMM) - Brain Based Teaching (BBT) - Blended Learning - Flipped Classroom - SWAYAM, MOOCs – experiential English language Learning- NEP 2020	

Text Books:

1. Baruah, T.C. (1993). The English Teacher's Handbook, New Delhi: Sterling Publishers.
2. Begum Jahitha, A. (2007). Enhancing *Communicative Competence*. Agra. Bhargava Book House.
3. Devaki, N. (2016). English Language Pedagogy. Delhi: Kalpaz Publications.

Reference Books:

1. Tondon, K.K. (2009). A guide to English Language Teaching. Jaipur: Mark Publications.
2. Prakash, Nita and Sinha, Kamala (2014). Advanced English Language Teaching, New Delhi: Pacific Books International.
3. Aggarwal, J.C. (2008). Principles, Methods & Techniques of Teaching. UP: Vikas Publishing House Pvt. Ltd.
4. Nawale, Deepti and Garg, Sheenam (2014).Teaching Techniques in English. New Delhi: Pacific Books International.
5. Vallabi (2012). Teaching of English. New Delhi: Neelkamal Publications.

E-Resources:

1. http://www.bdu.ac.in/cde/docs/ebooks/B-Ed/I/TEACHING_OF_ENGLISH.PDF
2. https://www.ebookbou.edu.bd/Books/Text/SOE/BEd/edbn1412/edbn_1412.pdf
3. https://egyankosh.ac.in/bitstream/123456789/8511/1/Unit-7.pdf
4. https://ddceutkal.ac.in/Syllabus/MA_Education/Education_Paper_5_ENGLISH.pdf
5. http://mpbou.edu.in/slm/B.Ed_SLM/bedteb3u4.pdf
6. https://www.celt.iastate.edu/teaching/effective-teaching-practices/revised-blooms-taxonomy/

Course Outcomes:

On completion of the course, students should be able to

CO 1 develop the listening comprehension and speaking skills
CO 2 apply with reading comprehension and writing skills
CO3 use various types of teaching resources & language teacher's competencies.
CO4 prepare lesson plan and describe text books.
CO5 utilize recent with the recent trends of language Teaching.

Mapping of COs with PSOs:

PSO / CO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	**Average**
CO1	3	2	3	3	2	2	**2.5**
CO2	3	2	3	3	2	2	**2.5**
CO3	3	3	3	3	3	3	**3**
CO4	3	3	3	3	3	3	**3**
CO5	3	3	3	3	3	3	**3**
Average	**3**	**2.6**	**3**	**3**	**2.6**	**2.6**	**2.8**

21EDNU02O2: TEACHING OF LANGUAGE TAMIL – II

Semester	II	Course Code	21EDNU02O2
Course Title	Teaching of Language Tamil – II		
No. of Credits	04	No. of Contact Hours per Week	4 Hours
New Course / Revised Course	Revised Course	If revised, % of revision effected	20%
Category	• Optional - II		
Scope of the Course	• Basic Skill/Advanced Skill • Skill Development • Employability		
Cognitive Levels addressed by the course	•K-1:(Remember) •K-2:(Understand) •K-3:(Apply) •K-4:(Analyze) •K-5:(Evaluate) • K-6:(Create)		

Course Objectives:

The Course aims to

- jkpo fwgpjjypy Nflly kwWk gbjjy jpwdfis tshggjwfhd topKiwfis gapwWtpjjy
- jkpo fwgpjjypy NgRjy kwWk vOJjy jpwdfis tshggjwfhd topKiwfis gapwWtpjjy
- nkhopahrpuaUffhd jFjpfis tpsfFjy.
- ghlj pllk kwWk ghlE}y jahhpgG rhhej fhuzpfis mwpa rnrajy
- jkpo fwgpjjypy gyNtW tifahd JizffUtpfspd gadghL gwwp Elgf$Wfis njhpeJnfhsSjy.

Course Content:

Unit	Content	No. of Hours
I	**Nflly kwWk gbjjy jpwdfs** Nflly: tiuaiw› Nflly jpwid tsujjYffhd Nehffqfs› topKiwfs: thndhypf Nflly› xypggjpTf Nflly› fijf$wy› tpLfijfs› Gjpufs Nflly› RUffpnaOJjy› ghlggFjpfisg gbjJ tpdhf Nflly› Nflly pd topf fwwy. gbjjy: Nehffqfs› njhlff tFggpy gbfff fwgpfFk Kiwfs: vOjJ Kiw gbgG› nrhy Kiw gbgG› nrhwnwhlu Kiw gbgG› epiw - Fiwfs. gbfFk Kiwfs: nrhwfsQrpag ngUffk› thafFs gbjjy› thatpLg gbjjy› tiffs: mfdw gbgG› Moej gbgG - Nehffqfs - epiw - Fiwfs.	13
II	**NgRjy kwWk vOJjy jpwdfs** NgRjy: tiuaiw› Nehffqfs› gadfs› jpUejpa Ngrrpd nghUejpa eyypayGfs. jpUejpa Ngrrpid tsuff JizahFk ,yffpaqfs: ehlfqfs› nrhwNghu› fyeJiuahly› tpdhb tpdh› ,yffpa kdwqfspy NgRjy› kdgghlk nrajy. crrupggpy VwgLk rpffyfs› gapwrfs: ehnefpog gapwrp ehggpwog gapwrp %rRg gapwrp. vOJjy: eyy ifnaOjjpd eyypayGfs: njspT› msT› moF› ,ilntsp tpiuT. vOjJg gapwrp Kiwfs: tupnahwp vOJjy› ghujJ vOJjy› nrhytij vOJjy. gpioapdw vOjg gapwrp mspjjy - gpiofs Njhdwf fhuzqfs - gpiofisf fisAk Kiwfs - epWjjwFwfisg gadgLjJjy - typ kpFk ,lk - kpfh ,lk.	13
III	**nkhopahrpuaUk thankhopg gapwrpAk** nkhopahrpuah: fytpjjFjp gzGeydfs› nkhopggwW› ,yffz ,yffpag Gyik› Fuypy Vww ,wffjJld NgRjy› csE}y tyYeu› gilgghwwy jpwd› Kdkhjpuahf tpsqFjy› flik czuTld nraygly› r%f cwT nfhsy› gpw Mrpuauld goFjy› gapwwypd mbggil tpjpfisf ifahsy. thankhopg gapwrp: tiuaiw› ,dwpaikahik› Nehffqfs› gadfs› thankhopg gapwrpaid gyNtW epiyfspy mspggjwfhd Kiwfs: rpWtu ghlyfs› fyeJiuahly› fij nrhyYjy› nrhwnghopTfs. crrupggpy VwgLk rpffyfs - kdgghlk nrajypd Kffpaj Jtqfs-	13

IV	**ghljjpllKk ghlE}Yk** ghljjpllk: tiuaiw› caue piyg gss ghljjpllk Ljwfhd fhuzpfs: jdpegu NtWghL - khwptUk rKjhak. ghlE}yfs: ghlE}yfspd mbggil› ghlE}ypd gzGfs. rwejg ghlE}yfisj jahufFknghOJ kdjwnfhssjjff nrajpfs. jwNghJ eilKiwapy css ghlE}y gwwpa ghuit: E}yfggbgG› tFgG Ehyfk› fUtp Ehyfk.	13
V	**nkhopffwgjjypd Elgf$Wfs** JizffUtpfisg gadgLjJjy: trpgG Ntfjij mstply(lhrp]lh]Nfhg)› thndhyp xypggjpT ehlh› xspggjpT› njhiyffhlrp nkhopggapwwhaTf$lk› fzpgnghwp ,izajsk› nrawiffNfhs› gyY}lfk› tpz zuqfk› fhnzhyp.	12

Text Books

1. fiyrnrytp. nt. (2009) jkpo gapwwy Elgqfs rQrtp ggspr H]><NuhL.
2. Kidth. Q. godpNtY (2006) nrejkpo fwgpfFk Kiwfs› maah epiyak› jQrhTh.

Reference Books

1. Nt ZNfhghy ,. gh. (1991) igejkpo fwgpfFk Kiwfs› rFejyh ntspaL› NtY}H.
2. fzgjp. tp. (1997) ewwkpo fwgpfFk Kiwfs› rhejh ggspr H]› nrdid.
3. Nt ZNfhghy ,. gh rhejFkhhp (1991) nghJjjkpo fwgpjjy › rFejyh ntspaL› NtY}H.

e-Resources

1. https://youtu.be/oJ0sVkrdmZQ - ehnefpog gapwrp ehggpwog gapwrp
2. https://youtu.be/HAuIt7nMPbE - typ kpFk ,lk
3. https://www.youtube.com/watch?v=qYcwKsBSKe0&t=18s- typ kpfh ,lk.
4. https://youtu.be/ZH7MecSZqXo - lhrp]lh]Nfhg

Course Outcomes

On completion of the course, students should be able to do

CO1: jkpo fwgpjjypy Nflly kwWk gbjjy jpwdfis rhpahf gadgLjj KbAk

CO2: jkpo fwgpjjypy NgRjy kwWk vOJjy jpwdfis rhpahf gadgLjj KbAk

CO3: nkhopahrpapaUffhd jFjpfis ntspggLjj KbAk.

CO4: vspa ghljpljjij cUthff KbAk

CO5: jkpo fwgpjjypy rhpahd JizffUtpis njhpT nraJ gadgLjj KbAk.

Mapping of COs with PSOs:

PSO / CO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	**Average**
CO1	3	3	3	3	2	3	**2.8**
CO2	3	3	3	3	2	2	**2.7**
CO3	3	2	2	3	3	3	**2.7**
CO4	3	2	2	2	3	3	**2.5**
CO5	3	3	3	2	3	3	**2.8**
Average	**3**	**2.6**	**2.6**	**2.6**	**2.6**	**2.8**	**2.7**

21EDNU02O3: TEACHING OF MATHEMATICS – II

Semester	: II	Course Code	: 21EDNU02O3
Course Title	: Teaching of Mathematics-II		
No. of Credits	: 04	No. of contact hours per Week	: 04
New Course/Revised Course	: Revised	If revised, Percentage of Revision effected (Minimum20%)	:30%
Category	**:** Optional-I		
Scope of the Course	: 1. Skill Development 2. Employability 3.Field Placement / Field Project Internship		
Cognitive Levels addressed by the Course	• K-1:(Remember) • K-2:(Understand) • K-3:(Apply) • K-4:(Analyze) • K-5:(Evaluate) • K-6 (Create)		

Course Objectives

The Course aims to

- know the importance of resources in teaching and learning of mathematics.
- understand the principles of curriculum construction with emphasis on content and organization
- acquaint with the library resources for teaching mathematics.
- gain the knowledge of good mathematics laboratory
- acquaint the skills of a good mathematics teacher

Unit	Content	No. of Hours
I	**Resources for Teaching Mathematics** Teaching Learning Materials (TLM): Meaning, importance and characteristics - Self-Learning Materials (SLM): meaning, importance and characteristics - projected aids & non-projected aids - traditional TLM: Charts, OHP and transparencies, slide and film projectors, models (static and working), flash cards, pictures, black board and chalk, flannel, magnetic and bulletin boards - uses of educational broadcasts: radio and TV lessons and educational values in teaching mathematics - teleconferencing, video conferencing, use of internet in teaching mathematics	**13**
II	**Curriculum Construction in Mathematics** Mathematics Curriculum: definition, need, importance and types - principles of curriculum construction- criteria for selection and organization of content - critical evaluation of tamilnadu secondary school mathematics curriculum and NCERT school curriculum - stages and different approaches followed in curriculum development in mathematics.	**13**
III	**Mathematics Text Book** Mathematics text book: qualities, need, importance - characteristics and criteria of a good mathematics text book - evaluation of mathematics text book - mathematics libraries: meaning, objectives, organization, important library resources and its utilization – steps to make mathematics library popular among the students - content analysis of mathematics text book up to X/XII standard.	**13**
IV	**Mathematics Laboratory** Mathematics laboratory: need, importance, features and structure - planning and organization of mathematics laboratory- rules, regulations and discipline in the laboratory - co-curricular activities: objectives, organization and activities of mathematics clubs, mathematics exhibitions; fieldtrips and excursions.	**13**
V	**Competencies of Mathematics Teacher** Mathematics teacher: general and specific qualities and professional competencies - teacher preparation: pre service and in-service training of mathematics teacher – types of in-service training - improvement of professional competencies of mathematics teacher - management of mathematics class: attention to individual differences - giving importance to problems raised by students - evaluation of mathematics teachers: meaning, need - modes and tools: higher authorities, peer, self-evaluation, evaluation by pupils, by informal talk and administering questionnaire - maintenance of records.	**12**

Reference Books

1. Aggarwal, J.C. (2008). Teaching of Mathematics. UP: Vikas Publishing House Pvt Ltd.
2. Anice, J.(2005). Teaching of Mathematics. Hyderabad: Neelkamal Publication Pvt.Ltd
3. Aruljothi, (2013). Teaching of Mathematics – I, Centum Press, New Delhi.
4. Kulbir Singh Sidhu, (2012). The Teaching of Mathematics, New Delhi: Sterling Publications.
5. Servas, W., Varga, T., (1995). Teaching School Mathematics, UNESCO.

E-Resources

1. https://ncert.nic.in/pdf/focus-group/math.pdf
2. https://egyankosh.ac.in/bitstream/123456789/46785/1/Unit-2.pdf
3. https://egyankosh.ac.in/bitstream/123456789/6691/1/Unit-4.pdf
4. https://egyankosh.ac.in/bitstream/123456789/46793/1/Unit-7.pdf

Course Outcomes

On completion of the course, students should be able to do

CO1: learn the importance of resources in teaching and learning of mathematics.

CO2: understand the principles of curriculum construction with emphasis oncontent and organization.

CO3: acquaint with the Library Resources for Teaching Mathematics.

CO4: gain the knowledge of good mathematics laboratory.

CO5: acquaint the skills of a good mathematics teacher.

Mapping of COs with PSOs:

PSO / CO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	**Average**
CO1	3	3	3	2	3	2	**2.7**
CO2	3	3	3	3	3	3	**3**
CO3	3	2	3	2	2	3	**2.5**
CO4	2	3	2	3	3	3	**2.7**
CO5	3	3	3	2	3	3	**2.8**
Average	**2.8**	**2.8**	**2.8**	**2.4**	**2.8**	**2.8**	**2.7**

21EDNU02O4: TEACHING OF PHYSICAL SCIENCE – II

Semester	:II	Course Code	: 21EDNU02O4
Course Title	: Teaching of Physical Science-II		
No. of Credits	: 04	No. of contact hours per Week	: 04
New Course/Revised Course	: Revised	If revised, Percentage of Revision effected (Minimum20%)	:20%
Category	**:** Optional-I		
Scope of the Course	• Skill Development • Employability • Field Placement/Field Project Internship		
Cognitive Levels addressed by the Course	• K-1:(Remember) • K-2:(Understand) • K-3:(Apply) • K-4:(Analyze) • K-5:(Evaluate)		

Course Objectives

The Course aims to

- learn the nature and scope of Physical Science.
- understand the objectives of teaching Physical Science.
- gain the skill of writing and analyzing lesson plans.
- practice various methods of teaching Physical Science.

identify various evaluation procedure in physical science teaching.

Unit	Content	No. of Hours
I	**Learning Resources in Physical Science** Teaching Learning Materials (TLM) and Self Learning Materials (SLM): meaning, importance and characteristics - Edgar Dale's cone of experience-Projected Vs Non-Projected aids. Traditional TLM: charts, OHP, slide and film projectors, charts, models (static and working), flash cards, pictures, different types of boards - modern TLM: Educational Broadcasts: Radio and TV, Computers, CCTV, Multimedia, Teleconferencing, Video Conferencing, Edusat and Internet.	**13**
II	**Curriculum Construction in Physical Science** Curriculum: definition, need, importance and types - principles of curriculum construction-criteria for selection and organization of content- Critical evaluation of Tamil Nadu Secondary School Physical Science curriculum and NCERT school curriculum - curriculum improvement projects in India and abroad: Indian Education Commission, New Policy on Education (NPE), Nuffield Physics and Chemistry Project, CHEM - Study, PSSC.	**13**
III	**Science Text Book** Physical science text book: qualities, need, importance - characteristics and criteria of a good science text book - evaluation of Science text book (Hunter's Score Card) - science libraries: meaning, objectives, organization, important library resources and its utilization – steps to make science library popular among the students - content analysis of Physical science text book from VIII to X/XII standard.	**13**
IV	**Physical Science Laboratory** Physical Science laboratory: need, importance, administration, features and structure - planning and organization of science laboratory-storage of apparatus and chemicals - improvisation of apparatus - records and registers to be maintained – rules, regulations and discipline in the laboratory - accidents and first aid- co-curricular activities: objectives, organization and activities of science clubs, science fairs and exhibitions; fieldtrips and excursions.	**12**
V	**Competencies of Science Teacher** Science teacher: qualification, qualities and professional competencies. professional development of science teacher -role of reflective journal. pre service and in-service training – types of in-service training - management of science class: attention to individual differences - teacher as a researcher - evaluation of science teachers: meaning, need - modes and tools: higher authorities, peer, self evaluation, evaluation by pupils, by informal talk and admin - maintenance of records.	**13**

Reference Books

1. Aggarwal J.C, (2007), Essentials of Educational Technology. Innovations in Teaching-Learning. Vikas Publications House, New Delhi.
2. Edger Dale, Audio-Visual Methods in Teaching, Revised Edition, Dryden Press, New York.
3. Guptha, *S.K. (*2001), Teaching of Physical Science in Secondary Schools, Sterling Publications.
4. Sharma.R.C. *(*2008), Modern Science Teaching. Dhanpat Rai Publishing Company (P) Ltd., New Delhi.
5. Sivarajan K. (2006), Trends and developments in Modern Educational Practices, Calicut University

E-Resources

1. https://ncert.nic.in/desm/pdf/phy_sci_partI.pdf
2. https://ncert.nic.in/desm/pdf/phy_sci_PartII.pdf
3. http://www.tnteu.ac.in/pdf/phy.pdf
4. http://www.bdu.ac.in/cde/docs/ebooks/B-Ed/I/TEACHING%20OF%20SCIENCE.pdf
5. http://rajanachen.com/wp-content/uploads/2017/06/Teaching-All-pages.pdf
6. http://www.ignouhelp.in/ignou-bes-141-study-material/

Course Outcomes

On completion of the course, students should be able to do

CO1: use appropriate TLM's for teaching Physical Science.

CO2: analyze the components of Physical science curriculum at secondary level.

CO3: evaluate the content of Science text books at secondary level

CO4: set up appropriate laboratory for teaching-learning of Physical science.

CO5: exhibit appropriate competencies and good qualities of a physical science teacher

Mapping of COs with PSOs:

PSO / CO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	**Average**
CO1	3	3	2	3	2	2	**2.5**
CO2	3	3	3	3	2	3	**2.8**
CO3	3	2	3	3	2	2	**2.5**
CO4	3	2	3	3	2	3	**2.7**
CO5	3	2	3	3	2	3	**2.7**
Average	**3**	**2.4**	**2.8**	**3**	**2**	**2.6**	**2.6**

21EDNU02O5: TEACHING OF BIOLOGICAL SCIENCE – II

Semester	: II	Course Code	21EDNU02O5
Course Title	: Teaching of Biological Science-II		
No. of Credits	: 04	No. of contact hours per Week	: 04
New Course/Revised Course	: Revised	If revised, Percentage of Revision effected (Minimum20%)	:20%
Category	**:** Optional-I		
Scope of the Course	• Skill Development • Employability • Field Placement/Field Project Internship		
Cognitive Levels addressed by the Course	• K-1:(Remember) • K-2:(Understand) • K-3:(Apply) • K-4:(Analyze) • K-5:(Evaluate)		

Course Objectives

The Course aims to make student teachers to

- choose appropriate tlm's forteaching biological science.
- explain the principles of curriculum construction.
- verify the qualities of a good biological science text book.
- gain the knowledge of establishing a good biological science laboratory.
- understand the qualities and competencies of a good science teacher.

Unit	Content	No. of Hours
I	**ICT IN Biological Science Teaching** Teaching Learning Materials (TLM):Meaning, importance and characteristics. Self-Learning Materials (SLM): Meaning, importance and characteristics. Edgar Dale's cone of Experience-Projected aids Vs Non-Projected aids. Traditional TLM:Charts, OHP and transparencies, Slide and Film projectors, Charts, Flash Cards, Pictures, Black board and Chalk, Flannel, Magnetic and Bulletin boards. Models in teaching Biological Science and its educational values. Modern TLM: Uses of Educational Broadcasts: Radio and TV Lessons and educational values in teaching Biological Science. Computers, Multimedia, Teleconferencing, Video Conferencing, Use of Internet in teaching Biological Science.	**13**
II	**Curriculum Construction In Biological Science** Biological Science Curriculum:Definition, need, importance and types. Principles of Curriculum construction- Criteria for selection and Organization of content. - Critical evaluation of Tamil Nadu Secondary School Biological Science curriculum and NCERT school curriculum. Curriculum improvement projects in India and Abroad: Indian Education Commission, New Policy on Education (NPE), Nuffield Foundation in Biological Science-Study, Biological Science **Curriculum Study (BSCS).**	**12**
III	**Science Text Book** Biological Science text book: Qualities, need, importance. Characteristics and Criteria of a good Biological science text book. - Evaluation of Biological Science text book (Hunter's Score Card) - Science Libraries: Meaning, objectives, organization, important library resources and its utilization. – Steps to make science library popular among the students. - Content analysis of Biological Science text book up to X/XII standard	**13**
IV	**Biological Science Laboratory** Biological Science laboratory: Need, Importance, Administration, Features and Structure. - Planning and organization of science laboratory-Storage of apparatus and chemicals. - Improvisation of apparatus - Records and Registers to be maintained – Rules, regulations and discipline in the laboratory -Accidents and first aid. Co-curricular Activities*:* Objectives, organization and activities of science clubs, science fairs and exhibitions; fieldtrips and excursions.	**13**
V	**Competencies of Science Teacher** Biological Science teacher: General and specific Qualities and Professional Competencies.	**13**

	Teacher Preparation: Pre service and In-service training of Biological science teacher – types of in-service training. - Improvement of professional competencies of Biological science teacher. Management of science class: Attention to individual differences - Giving importance to problems raised by students. - Evaluation of science teachers: meaning, need. - Modes andtools: Higher authorities, Peer, Self-Evaluation, Evaluation by pupils, by informal talk and administering questionnaire - Maintenance of records.	

Text Books

1. Aggarwal J.C, (2007), Essentials of Educational Technology. *Innovations in Teaching-Learning*. Vikas Publications House, New Delhi.
2. Ameetha. P, Kamakshi. J &Srinivas. K. (2014). Methods of Teaching Biological Science, Neelkamal Publications, New Delhi.

Reference Books

1. Guptha, *S.K. (*2001), *Teaching of Physical Science in Secondary Schools*, Sterling Publications.
2. Sharma, Y.K. (2003). Teaching of Physical Science, Kanishka Publishers, New Delhi.
3. Zaidi, S.M. (2004). Mmodern Teaching of Life Sciences, Anmol Publications, New Delhi.

E-Resources

1. https://www.slideshare.net/suchetanapawar/ict-integration-in-science
2. https://www.slideshare.net/abubashars/pedagogy-of-biological-science
3. https://www.learningclassesonline.com/2020/11/pedagogy-of-biological-science.html
4. https://www.slideshare.net/sreenayana/the-science-laboratory-welcome-2
5. https://files.eric.ed.gov/fulltext/EJ1052305.pdf

Course Outcomes

CO1: use appropriate TLM's for teaching Biology.
CO2: analyze the components of Biology curriculum at secondary level.
CO3: evaluate the content of Biology text books at secondary level
CO4: set up appropriate laboratory for teaching-learning of Biology
CO5: exhibit appropriate competencies and good qualities of a Biology teacher.

Mapping of COs with PSOs:

PSO / CO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	**Average**
CO1	3	3	2	3	3	3	2.83
CO2	3	2	3	2	1	3	2.3
CO3	3	3	3	2	3	3	2.8
CO4	2	3	3	2	3	3	2.7
CO5	3	3	3	2	3	2	2.7
Average		2.8	2.8	2.8	2.2	2.6	2.8

21EDNU02O6: TEACHING OF ENGLISH EDUCATION – II

Semester	II	Course Code	21EDNU02O6
Course Title	**TEACHING OF ENGLISH EDUCATION - II**		
No. of Credits	04	No. of Contact Hours per Week	4 Hours
New Course / Revised Course	Revised Course	If revised, % of revision effected	20%
Category	Optional - II		
Scope of the Course	1. Employability 2. Advanced Skill		
Cognitive Levels addressed by the course	: K-1 (Remember) K-2 (Understand) K-3 (Apply) K-4 (Analyze) K-5 (Evaluate)		

Course Objectives:

The Course aims to

- familiarize with the concepts Pedagogy of English.
- know the importance of reference and study skills.
- understand role of Brain in language learning.
- identify and use technological resources for ELT.
- acquire knowledge on content analysis and analyze the principles of evaluation in English Language Teaching

Course Content:

Unit	Content	Hours
I	**English Language Acquisition** Language acquisition: Meaning, Characteristics of a Language - Theories: Cognitivism, Nativism, Organic Theory, Discourse and Neuro functional theory - Communicative Competence: Meaning, Grammatical Competence, Discourse Competence, Strategic Competence, And Socio-linguistic Competence, Strategies to develop Communicative Competence –essential learning and critical thinking (NPE,2020- 4:5) – Service Environment and Culture in schools ((NPE,2020: 5.9, 5.10, 5.11)	13
II	**Reference And Study Skills** Teaching Reference Skills: Dictionary, Thesaurus, Encyclopedia – Bibliography - Annotated Bibliography - Library: Meaning, Definition, Sections in Library – Classification of Books - General Instructions for using a library. Teaching Study Skills: Note Taking and Note Making: Characteristics, Process and Advantages – Paraphrasing - summarizing – paraphrasing – elaborating.	13
III	**Brain And Language Learning** Brain and Language – Language areas –brain and Language learning - Learning difficulties: Meaning, Definition, Types - Dyslexia: Meaning, Definition, Causes, Remedies - Dysgraphia: Meaning, Definition, Causes, Remedies - ADHD: Meaning, Definition, Causes, Remedies - Aphasia: Meaning, Definition, Causes, Remedies. Role of teachers to handle students with language learning difficulties.	13
IV	**Technological Resources For ELT** Computer Assisted Instruction CAI - e-learning - m-learning (Mobile) – Skype – PPT - Digital Scrap Book - e-books – Internet – Webpages – Multimedia - Social networks: Face book, Twitter, Whatsapp.	12
V	**Content analysis and Evaluation in English** Understanding relation between curriculum, syllabus and text book - Content Analysis of IX to X std. books prescribed by Tamilnadu Text Book Society - Evaluation: Purpose, Principles, Characteristics of good test - Techniques of Evaluation: Portfolio, Self-evaluation, Objective type test, Remedial test, Peer Evaluation, Socio metric, Open-book tests: Strengths and Limitations, Continuous and Comprehensive Evaluation (CCE), TET Exam.	13

Text Books:

1. Begum Jahitha, A. (2007). Enhancing *Communicative Competence*. Agra. Bhargava Book House.
2. Devaki, N. (2016). English Language Pedagogy. Delhi: Kalpaz Publications.
3. Evangelin Arulsevi, (2012). Teaching of special English, Tamil Nadu Teacher Education University, Gowtra Agencies, Chennai.

Reference Books:

1. David Nunan (2010) Research methods in Language Learning Cambridge University press.
2. Nanda, K. (1989). Developing English Comprehension, Sterling Publishers, New Delhi.
3. Shaila Mahan, (2013). Teaching Englsih Communicatively, Principles, Practices and Perspectives Y king Books, Jaipur.
4. Baruah, T.C. (1993). The English Teacher's Handbook, New Delhi: Sterling Publishers.
5. Tondon, K.K. (2009). A guide to English Language Teaching. Jaipur: Mark Publications.

E-Resources:

1. https://www.slideshare.net/irwyn12/using-technology-in-the-language-classroom-presentation
2. https://www.slideshare.net/zanamohd1/first-language-acquisition-and-second-language-acquisition
3. https://www.slideshare.net/wendy63/referencing-skills
4. https://slideplayer.com/slide/6039174/
5. https://www.slideshare.net/eibeed/content-analysis-10187392
6. https://www.slideshare.net/jkdange/tools-n-techniques-of-evaluation

Course Outcomes:

On completion of the course, students should be able to do

CO 1 apply the theories of English language acquisition in teaching.
CO 2 acquirereference and study skills.
CO 3 explain the Brain and language learning techniques.
CO 4 identify the appropriate technological resources for ELT.
CO 5 analyze the Content of Text Books and evaluate in English language learning.

Mapping of COs with PSOs:

PSO / CO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	**Average**
CO1	2	3	2	3	2	3	2.5
CO2	3	3	1	2	3	2	2.33
CO3	2	2	2	2	3	2	2.17
CO4	3	3	3	2	2	2	2.5
CO5	2	2	2	2	1	2	1.83
Average	2.4	2.6	2	2.2	2.2	2.2	2.27

21EDNU02O7: TEACHING OF TAMIL EDUCATION – II

Semester	II	Course Code	21EDNU02O7
Course Title	**TEACHING OF TAMIL EDUCATION – II**		
No. of Credits	04	No. of contact hours per Week	04
New Course/ Revised Course	Revised Course	If revised, Percentage of Revision effected (Minimum20%)	20%
Category	• Option II		
Scope of the Course (may be more than one)	• Basic Skill/Advanced Skill • Skill Development • Employability		

Cognitive Levels addressed by the Course	• K-1:(Remember) • K-2:(Understand) • K-3:(Apply) • K-4:(Analyze) • K-5:(Evaluate) • K-6:(Create)
CourseObjectives	The Course aims to • nkho ffwg jjy d tsqfis milahsk fhZjy. • nkho ffwwy Yss ,lughLfis glbay lL mwjy • fz gnghw kwWk mwtay y jkonkho a d jhffk gww Muhajy • nkho ahwwiy tsuggjwfhd Elgqfis gadgLjj thaggs jjy • Nkye iy tFgG nkho g ghlqfis gFgghaT nraAk Kiwfis t sfFjy.

UNIT	CONTENT	No. of Hours
I	**myF 1 nkho ffwg jjy y tsqfs** nkho ffwwy: nkho ffy t a d ,dw aikahik› nkho Ak r%fKk› nkho tsurr a y #oe iya d gqF› nkho fwwYffhd cst ay nfhsiffs: fhfNd› g&dH› g ahl. tsqfs: ,yffz ,yff aqfs› e fzLfs› mfuhj fs› fiyffsQr aqfs› ciuEhyfs› jko nrhwfsQr ak MaT flLiufs› Mat jofs.	13
II	**myF 2.nkho ffwwy y VwgLk ,lughLfs** ,lughLfs: t sffk› g iofs: t sffk› tiffs: NgrRgg io: t sffk› jtwhf xy jjy› j Ujjkhd nrhy mwahik› nghUsNtWghL mwahik› rej gg io› kaqnfhy gg io. vOjJgg io: t sffk› xUik› gdik› kaffk› j iz› ghy KbTfs y g io. ty k Fk lk - k fh ,lk. e Wjjw Fw fs.	13
III	**myF 3. fz gnghw kwWk mwtay y jkonkho a d jhffk** fz gnghw Ak-jkOk› mwtayjko: t sffk› jko mwtay kwWk njhoy Elgqfs› gyYhlfk %yk jko fwg jjy› jko ,izak. jko Mlr nkho ahtjy VwgLk r ffyfs- efFk to Kiwfs. fiyrnrhwfs: fiyrnrhwfis cUthfFk to Kiwfs› jko Yss gwnkho r nrhwfs.	13
IV	**myF 4. tFggiwa y nkho ahwwiy tsujjy** gilgghwwy: jftyfis j ully› gilgghwwy jdikfis NkkgLjJjy› jOty›<LflLjy› k FjJf fhzy› FiwjJf fhzy. gilgghwwy tbtqfs: jiygG jUjy› Fw gGfs jUjy› Kbit khww jUjy›<wwlb jUjy› fij› ft ij. ft ijiaf fhlr g gLjJjy.	13
V	**myF 5.ghlgnghUs MaT** Nkye iy tFgG nkho g ghlEhyfis gFgghaT nrajy.	13
References	Text Books(with chapter number & page number, wherever needed): 1. Nt Z Nfhghy ,. gh rhejFkhh (1991) nghJjjk o fwg jjy › rFejyh nts aL› NtY}H. kdhlr Rejuk (2013) ghlgnghUs kwWk jko fwg jjy (nghJj jko)› fhtakhyh ggs ru]› j zLffy. 2. j z lghd. R (2013) jko fwg jjy› kdh g j ggfk› kJiu. 3. Kidth. Q. god NtY (2006) nrejko fwg fFk Kiwfs› maah e iyak› jQrhT h.	

	4. f i y r n r y t ,. n t . (2009) j k ,o g a ,w w y E l g q f s r Q r t , g g s ,H] ><N u h L.
	E-Resources (URLs of e-books/You Tube videos/ online learning resources, etc.) 1. https://youtu.be/DVcJRzoiDNk - e ,f z L f s 2. https://youtu.be/HAuIt7nMPbE - t y , k ,F k , l k 3. https://www.youtube.com/watch?v=qYcwKsBSKe0&t=18s- t y , k ,f h , l k. 4. https://youtu.be/DQlNd__t8p0 - e ,W j j w F w ,f s.
Course Outcomes	On completion of the course, students should be able to do CO1: nkho ,f f w g ,j j y ,d t s q f i s g a d g L j j , nkho , f w g ,j j i y N k k g L j j K b A k . CO2: nkho ,f f w w y ,Y s s , l u g h L f i s , d k f z L f i s a K b A k CO3: f z ,g n g h w , k w W k m w ,t ,a y g a d g L f s ,y j k ,o n k h o ,i a j ,w k g l g a d g L j j K b A k. CO4: nkho ,a h w w i y t s u g g j w f h d r h ,a h d E l g q f i s g a d g L j j K b A k. CO5: N k y e ,i y t F g G nkho ,g g h l q f i s g F g g h a T n r a a K b A k.

Mapping of COs with PSOs:

PSO / CO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	**Average**
CO1	3	3	1	3	3	3	2.67
CO2	3	3	1	2	2	2	2.16
CO3	3	3	1	2	3	3	2.5
CO4	3	3	1	2	3	3	2.5
CO5	3	3	1	2	2	3	2.33
Average	3	3	1	2.2	2.6	2.8	2.42

21EDNU02O8: TEACHING OF MATHEMATICS EDUCATION – II

Semester	: II	Course Code	: 21EDNU02O8
Course Title	: Teaching of Mathematics Education -II		
No. of Credits	: 04	No. of contact hours per Week	: 04
New Course/Revised Course	: Revised	If revised, Percentage of Revision effected (Minimum20%)	:30%
Category	**:** Optional-I		
Scope of the Course	: 1. Skill Development 2. Employability 3.Field Placement / Field Project Internship		
Cognitive Levels addressed by the Course	• K-1:(Remember) • K-2:(Understand) • K-3:(Apply) • K-4:(Analyze) • K-5:(Evaluate) • K-6 (Create)		

Course Objectives

The Course aims to

- know the importance of resources in teaching and learning of mathematics.
- understand the principles of curriculum construction with emphasis on content and organization
- acquaint with the library resources for teaching mathematics.
- gain the knowledge of good mathematics laboratory
- acquaint the skills of a good mathematics teacher

Unit	Content	No. of Hours
I	**Resources for Teaching Mathematics** Teaching Learning Materials (TLM): Meaning, importance and characteristics - Self-Learning Materials (SLM): meaning, importance and characteristics - projected aids & non-projected aids - traditional TLM: Charts, OHP and transparencies, slide and film projectors, models (static and working), flash cards, pictures, black board and chalk, flannel, magnetic and bulletin boards - uses of educational broadcasts: radio and TV lessons and educational values in teaching mathematics - teleconferencing, video conferencing, use of internet in teaching mathematics	**13**
II	**Curriculum Construction in Mathematics** Mathematics Curriculum: definition, need, importance and types - principles of curriculum construction- criteria for selection and organization of content - critical evaluation of tamilnadu secondary school mathematics curriculum and NCERT school curriculum - stages and different approaches followed in curriculum development in mathematics.	**13**
III	**Mathematics Text Book** Mathematics text book: qualities, need, importance - characteristics and criteria of a good mathematics text book - evaluation of mathematics text book - mathematics libraries: meaning, objectives, organization, important library resources and its utilization – steps to make mathematics library popular among the students - content analysis of mathematics text book up to X/XII standard.	**13**
IV	**Mathematics Laboratory** Mathematics laboratory: need, importance, features and structure - planning and organization of mathematics laboratory- rules, regulations and discipline in the laboratory - co-curricular activities: objectives, organization and activities of mathematics clubs, mathematics exhibitions; fieldtrips and excursions.	**13**
V	**Competencies of Mathematics Teacher** Mathematics teacher: general and specific qualities and professional competencies - teacher preparation: pre service and in-service training of mathematics teacher – types of in-service training - improvement of professional competencies of mathematics teacher - management of mathematics class: attention to individual differences - giving importance to problems raised by students - evaluation of mathematics teachers: meaning, need - modes and tools: higher authorities, peer, self-evaluation, evaluation by pupils, by informal talk and administering questionnaire - maintenance of records.	**12**

Reference Books

1. Aggarwal, J.C. (2008). Teaching of Mathematics. UP: Vikas Publishing House Pvt Ltd.
2. Anice, J.(2005). Teaching of Mathematics. Hyderabad: Neelkamal Publication Pvt.Ltd
3. Aruljothi, (2013). Teaching of Mathematics – I, Centum Press, New Delhi.
4. Kulbir Singh Sidhu, (2012). The Teaching of Mathematics, New Delhi: Sterling Publications.
5. Servas, W., Varga, T., (1995). Teaching School Mathematics, UNESCO.

E-Resources

1. https://ncert.nic.in/pdf/focus-group/math.pdf
2. https://egyankosh.ac.in/bitstream/123456789/46785/1/Unit-2.pdf
3. https://egyankosh.ac.in/bitstream/123456789/6691/1/Unit-4.pdf
4. https://egyankosh.ac.in/bitstream/123456789/46793/1/Unit-7.pdf

Course Outcomes

On completion of the course, students should be able to do

CO1: learn the importance of resources in teaching and learning of mathematics.

CO2: understand the principles of curriculum construction with emphasis on content and organization.

CO3: acquaint with the Library Resources for Teaching Mathematics.

CO4: gain the knowledge of good mathematics laboratory.

CO5:acquaint the skills of a good mathematics teacher.

Mapping of COs with PSOs:

PSO / CO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	**Average**
CO1	3	3	3	2	3	2	**2.7**
CO2	3	3	3	3	3	3	**3**
CO3	3	2	3	2	2	3	**2.5**
CO4	2	3	2	3	3	3	**2.7**
CO5	3	3	3	2	3	3	**2.8**
Average	**2.8**	**2.8**	**2.8**	**2.4**	**2.8**	**2.8**	**2.7**

21EDNU02O9: TEACHING OF PHYSICAL SCIENCE EDUCATION - II

Semester	:II	Course Code	: 21EDNU02O9
Course Title	: Teaching of Physical Science Education-II		
No. of Credits	: 04	No. of contact hours per Week	: 04
New Course/Revised Course	: Revised	If revised, Percentage of Revision effected (Minimum20%)	:20%
Category	**:** Optional-II		
Scope of the Course	• Skill Development • Employability • Field Placement/Field Project Internship		
Cognitive Levels addressed by the Course	• K-1:(Remember) • K-2:(Understand) • K-3:(Apply) • K-4:(Analyze) • K-5:(Evaluate)		

Course Objectives

The Course aims to

- learn the nature and scope of Physical Science.
- understand the objectives of teaching Physical Science.
- gain the skill of writing and analyzing lesson plans.
- practice various methods of teaching Physical Science.

identify various evaluation procedure in physical science teaching.

Unit	Content	No. of Hours
I	**Learning Resources in Physical Science** Teaching Learning Materials (TLM) and Self Learning Materials (SLM): meaning, importance and characteristics - Edgar Dale's cone of experience-Projected Vs Non-Projected aids. Traditional TLM: charts, OHP, slide and film projectors, charts, models (static and working), flash cards, pictures, different types of boards - modern TLM: Educational Broadcasts: Radio and TV, Computers, CCTV, Multimedia, Teleconferencing, Video Conferencing, Edusat and Internet.	**13**
II	**Curriculum Construction in Physical Science** Curriculum: definition, need, importance and types - principles of curriculum construction- criteria for selection and organization of content- Critical evaluation of Tamil Nadu Secondary School Physical Science curriculum and NCERT school curriculum - curriculum improvement projects in India and abroad: Indian Education Commission, New Policy on Education (NPE), Nuffield Physics and Chemistry Project, CHEM - Study, PSSC.	**13**
III	**Science Text Book** Physical science text book: qualities, need, importance - characteristics and criteria of a good science text book - evaluation of Science text book (Hunter's Score Card) - science libraries: meaning, objectives, organization, important library resources and its utilization – steps to make science library popular among the students - content analysis of Physical science text book from VIII to X/XII standard.	**13**
IV	**Physical Science Laboratory** Physical Science laboratory: need, importance, administration, features and structure - planning and organization of science laboratory-storage of apparatus and chemicals - improvisation of apparatus - records and registers to be maintained – rules, regulations and discipline in the laboratory - accidents and first aid- co-curricular activities: objectives, organization and activities of science clubs, science fairs and exhibitions; fieldtrips and excursions.	**12**
V	**Competencies of Science Teacher** Science teacher: qualification, qualities and professional competencies. professional development of science teacher -role of reflective journal. pre service and in-service training –types of in-service training - management of science class: attention to individual differences - teacher as a researcher - evaluation of science teachers: meaning, need - modes and tools: higher authorities, peer, self evaluation, evaluation by pupils, by informal talk and admin - maintenance of records.	**13**

Reference Books

1. Aggarwal J.C, (2007), Essentials of Educational Technology. Innovations in Teaching-Learning. Vikas Publications House, New Delhi.
2. Edger Dale, Audio-Visual Methods in Teaching, Revised Edition, Dryden Press, New York.
3. Guptha, *S.K. (*2001), Teaching of Physical Science in Secondary Schools, Sterling Publications.
4. Sharma.R.C. *(*2008), Modern Science Teaching. Dhanpat Rai Publishing Company (P) Ltd., New Delhi.
5. Sivarajan K. (2006), Trends and developments in Modern Educational Practices, Calicut University

E-Resources

1. https://ncert.nic.in/desm/pdf/phy_sci_partI.pdf
2. https://ncert.nic.in/desm/pdf/phy_sci_PartII.pdf
3. http://www.tnteu.ac.in/pdf/phy.pdf
4. http://www.bdu.ac.in/cde/docs/ebooks/B-Ed/I/TEACHING%20OF%20SCIENCE.pdf
5. http://rajanachen.com/wp-content/uploads/2017/06/Teaching-All-pages.pdf

Course Outcomes

On completion of the course, students should be able to do

CO1: use appropriate TLM's for teaching Physical Science.

CO2: analyze the components of Physical science curriculum at secondary level.

CO3: evaluate the content of Science text books at secondary level

CO4: set up appropriate laboratory for teaching-learning of Physical science.

CO5: exhibit appropriate competencies and good qualities of a Physical Science teacher.

Mapping of COs with PSOs:

PSO / CO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	**Average**
CO1	3	3	2	3	2	2	**2.5**
CO2	3	3	3	3	2	3	**2.8**
CO3	3	2	3	3	2	2	**2.5**
CO4	3	2	3	3	2	3	**2.7**
CO5	3	2	3	3	2	3	**2.7**
Average	**3**	**2.4**	**2.8**	**3**	**2**	**2.6**	**2.6**

21EDNU02O10: TEACHING OF BIOLOGICAL SCIENCE EDUCATION - II

Semester	: II	Course Code	:21EDNU02O10
Course Title	: Teaching of Biological Science Education -II		
No. of Credits	: 04	No. of contact hours per Week	: 04
New Course/Revised Course	: Revised	If revised, Percentage of Revision effected (Minimum20%)	:20%
Category	**:** Optional-II		
Scope of the Course	• Skill Development • Employability • Field Placement/Field Project Internship		
Cognitive Levels addressed by the Course	• K-1:(Remember) • K-2:(Understand) • K-3:(Apply) • K-4:(Analyze) • K-5:(Evaluate)		

Course Objectives

The Course aims to make student teachers to

- choose appropriate tlm's for teaching biological science.
- explain the principles of curriculum construction.
- verify the qualities of a good biological science text book.
- gain the knowledge of establishing a good biological science laboratory.
- understand the qualities and competencies of a good science teacher.

Unit	Content	No. of Hours
I	**ICT IN Biological Science Teaching** Teaching Learning Materials (TLM):Meaning, importance and characteristics. Self-Learning Materials (SLM): Meaning, importance and characteristics. Edgar Dale's cone of Experience-Projected aids Vs Non-Projected aids. Traditional TLM:Charts, OHP and transparencies, Slide and Film projectors, Charts, Flash Cards, Pictures, Black board and Chalk, Flannel, Magnetic and Bulletin boards. Models in teaching Biological Science and its educational values. Modern TLM: Uses of Educational Broadcasts: Radio and TV Lessons and educational values in teaching Biological Science. Computers, Multimedia, Teleconferencing, Video Conferencing, Use of Internet in teaching Biological Science.	**13**
II	**Curriculum Construction In Biological Science** Biological Science Curriculum: Definition, need, importance and types. Principles of Curriculum construction- Criteria for selection and Organization of content. - Critical evaluation of Tamil Nadu Secondary School Biological Science curriculum and NCERT school curriculum. Curriculum improvement projects in India and Abroad: Indian Education Commission, New Policy on Education (NPE), Nuffield Foundation in Biological Science- Study, Biological Science **Curriculum Study (BSCS).**	**12**
III	**Science Text Book** Biological Science text book: Qualities, need, importance. Characteristics and Criteria of a good Biological science text book. - Evaluation of Biological Science text book (Hunter's Score Card) - Science Libraries: Meaning, objectives, organization, important library resources and its utilization. – Steps to make science library popular among the students. - Content analysis of Biological Science text book up to X/XII standard	**13**
IV	**Biological Science Laboratory** Biological Science laboratory: Need, Importance, Administration, Features and Structure. - Planning and organization of science laboratory-Storage of apparatus and chemicals. - Improvisation of apparatus - Records and Registers to be maintained – Rules, regulations and discipline in the laboratory -Accidents and first aid. Co-curricular Activities*:* Objectives, organization and activities of science clubs, science fairs and exhibitions; fieldtrips and excursions.	**13**
V	**Competencies of Science Teacher** Biological Science teacher: General and specific Qualities and Professional Competencies. Teacher Preparation: Pre service and In-service training of Biological science teacher –	**13**

	types of in-service training. - Improvement of professional competencies of Biological science teacher. Management of science class: Attention to individual differences - Giving importance to problems raised by students. - Evaluation of science teachers: meaning, need. - Modes andtools: Higher authorities, Peer, Self-Evaluation, Evaluation by pupils, by informal talk and administering questionnaire - Maintenance of records.	

Text Books

1. Aggarwal J.C, (2007), Essentials of Educational Technology. *Innovations in Teaching-Learning*. Vikas Publications House, New Delhi.
2. Ameetha. P, Kamakshi. J &Srinivas. K. (2014). Methods of Teaching Biological Science, Neelkamal Publications, New Delhi.

Reference Books

1. Guptha, *S.K. (*2001), *Teaching of Physical Science in Secondary Schools*, Sterling Publications.
2. Sharma, Y.K. (2003). Teaching of Physical Science, Kanishka Publishers, New Delhi.
3. Zaidi, S.M. (2004). Mmodern Teaching of Life Sciences, Anmol Publications, New Delhi.

E-Resources

1. https://www.slideshare.net/suchetanapawar/ict-integration-in-science
2. https://www.slideshare.net/abubashars/pedagogy-of-biological-science
3. https://www.learningclassesonline.com/2020/11/pedagogy-of-biological-science.html
4. https://www.slideshare.net/sreenayana/the-science-laboratory-welcome-2
5. https://files.eric.ed.gov/fulltext/EJ1052305.pdf

Course Outcomes

CO1: use appropriate TLM's for teaching Biology.
CO2: analyze the components of Biology curriculum at secondary level.
CO3: evaluate the content of Biology text books at secondary level
CO4: set up appropriate laboratory for teaching-learning of Biology
CO5: exhibit appropriate competencies and good qualities of a Biology teacher.

Mapping of COs with PSOs:

PSO / CO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	**Average**
CO1	3	3	2	3	3	3	2.83
CO2	3	2	3	2	1	3	2.3
CO3	3	3	3	2	3	3	2.8
CO4	2	3	3	2	3	3	2.7
CO5	3	3	3	2	3	2	2.7
Average		2.8	2.8	2.8	2.2	2.6	2.8

21EDNU0307: CURRICULUM AND SCHOOL

Semester	: III	Course Code	: 21 EDNU0307
Course Title	: Curriculum and School		
No. of Credits	: 04	No. of contact hours per Week	: 04
New Course/Revised Course	: Revised	If revised, Percentage of Revision effected (Minimum20%)	:20%
Category	**:** Core		
Scope of the Course	• Basic Skill / Advanced Skill • Field Placement/Field Project Internship		
Cognitive Levels addressed by the Course	• K-1:(Remember) • K-2:(Understand) • K-3:(Apply) • K-4:(Analyze) • K-5:(Evaluate)		

Course Objectives

The Course aims to make prospective teachers

- understand the importance of perspectives of curriculum.
- analyse the foundations of curriculum.
- classify various types of curriculum applicable to schools.
- explore changes and innovations in framing curriculum.
- familiarize with the Curriculum Reforms and evaluation in India.

Unit	Content	No. of Hours
I	**Introduction to Curriculum** Curriculum: Meaning, definition, nature & scope of curriculum, basic principles of curriculum need and importance of curriculum, structure of curriculum, characteristics of good curriculum- curriculum and syllabus - curriculum development: concept steps, process, and role of teacher in curriculum development.	**13**
II	**Foundations of Curriculum** Philosophical, Sociological and psychological foundations of curriculum development; selection of content: criteria for selection of content or subject matter of curriculum – reasons of inclusion and exclusion of a subject in school curriculum	**12**
III	**Types of Curriculum** Subject centered curriculum - learner centered curriculum - activity centered curriculum - core curriculum – spiral curriculum - problem centered curriculum – hidden curriculum - null curriculum –social oriented curriculum – humanistic curriculum – the undifferentiated curriculum.	**13**
IV	**Curriculum Change and Innovation** Curriculum change: Concept, need, objectives, nature, categories, factors influencing curriculum reform, curriculum transaction and mode; innovation: role of technology in curriculum transaction, ict curriculum for secondary students, ict literacy and application of ict in subject area.	**13**
V	**Curriculum Reforms and Evaluation** Curriculum reforms in india- ncf 2005, ncfte 2009; text book: meaning, characteristics and critical analysis of text books; curriculum evaluation: objectives, purpose, types and criteria for curriculum evaluation; models of curriculum evaluation: tyler's, rober e.stake, stufflebeam's cipp model - hilda taba's and saran model.	**13**

Text Books

1. Aggarwal, J.C., (1990). Curriculum Reforms in India. Delhi: Doaba House
2. Arulsamy, S., (2010).Curriculum Development. Neelkamal Publications Pvt,.Ltd, Hyderabad

Reference Books

1. Bhatt B.D., (1996). Curriculum Reform Change and Continuity. New Delhi: Kanishka Publications.
2. IGNOU, (1992). Curriculum Development for Distance Education, New Delhi
3. Sharma, R.A. (2005). Curriculum Development and Instruction. Meerut: R. Laal Book Depot

e-Resources

1. https://egyankosh.ac.in/
2. https://epgp.inflibnet.ac.in/
3. https://www.swayamprabha.gov.in/
4. http://www.tnteu.ac.in/pdf/knowledge.pdf
5. https://ncte.gov.in/Website/OER/courses.aspx

Course Outcomes

On completion of the course, students should be able to do

CO1: explain the meaning and perspectives of curriculum.
CO2: distinguish the foundations of curriculum.
CO3: identify different types of curriculum
CO4: use technology in curriculum transaction
CO5: adopt recent changes in curriculum reforms and evaluation.

Mapping of COs with PSOs:

PSO / CO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	**Average**
CO1	3	3	2	3	2	2	**2.5**
CO2	3	3	3	3	2	2	**2.7**
CO3	3	2	3	3	2	2	**2.5**
CO4	3	2	3	3	2	3	**2.7**
CO5	3	2	3	3	2	1	**2.3**
Average	**3**	**2.4**	**2.8**	**3**	**2**	**2**	**2.5**

21EDNU0308: SCHOOL MANAGEMENT, LEADERSHIP AND ACTION RESEARCH

Semester	: III	Course Code	: 21 EDNU0308
Course Title	: School Management, Leadership and Action Research		
No. of Credits	: 04	No. of contact hours per Week	: 04
New Course/Revised Course	: Revised	If revised, Percentage of Revision effected (Minimum20%)	:30%
Category	**:** Core		
Scope of the Course	1. Employability 2. Value added course in teacher education field		
Cognitive Levels addressed by the Course	• K-1:(Remember) • K-2:(Understand) • K-3:(Apply) • K-4:(Analyze) • K-5:(Evaluate)		

Course Objectives

The Course aims to make prospective teachers

- know the basic concepts of educational planning and institutional planning.
- understand and the scope of educational administration and school administration
- analyse the role of educational management and leadership.
- Explore various educational organization and supervision.
- familiarize the concept of Action Research.

Unit	Content	No. of Hours
I	**Educational Planning** Planning: Meaning, Definition, Nature. Educational Planning: Meaning, Definition, Need, Features. Different levels of Educational Planning - Long term & Short term plan -Education in Five year plan. Institutional Planning: Meaning, Definition, Need, Objectives and Characteristics, Components, Steps, Scopes and Limitations.	**13**
II	**School Administration and Leadership** Educational Administration: Meaning, Definition, Principles and Importance. Administration Vs Management. National and State level Advisory Bodies: UGC, NCERT, NCTE, NUEPA CABE, SCERT, RCI.SchoolAdministration: Meaning, Concept, Features, Scope and Characteristics. Role of Administrative Authorities: CEO, DEO. DEEO, AEEO, VEC, PTA. School Administration: Headmaster - Role and Function in School Administration, Monitoring, Supervision and Evaluation. Leadership: Meaning, Definition, Need and Styles.	**13**
III	**Educational Management and Management of Resources** Management: Meaning, Definition, Nature, Characteristics and Process or Functions of Management: PODSCORB. Educational Management: Meaning, Definition, Importance, Characteristics, Scope, Functions and Aspects. Educational Management at the School Level Human and Non- Human Resources – Types. Management of Human Resources: Interpersonal, Inter-group Relationship, Teacher- Teacher Relationship, Relationship with Management and Administration - Management of Non-Human Resources: School Building, Library, Laboratory, Hostels, and Playground - Management of Financial Resources: Preparation and Monitoring of Budgets at the School Level.	**13**
IV	**Educational / School Organization and Supervision** Organization: Meaning, definition, characteristics, Factors. School Organisation: Meaning, Definition, Importance and principles, School and community, Quality in Education: Meaning, Definition, indicators and importance. Total Quality Management in Education (TQM). Educational Supervision: Meaning, Definition, Principles & Importance. Management and Supervision - Headmaster, Role and Function in Monitoring, Supervision and Evaluation - Teacher's Role in Management of Various Curricular and Co-Curricular Activities.	**13**
V	**Action Research** Action Research: Meaning, Definition, Nature, Scope and Principles. Selecting problems for action research. Steps in action research. Teacher as action researcher. Examples for action research. Reporting action research.	**12**

Text Books

1. Dash B.N, (2011). School organization administration and management, Neelkamal Publications, New Delhi.
2. Laxmi Devi, (1998), Educational Planning, Anmol Publications, New Delhi.

Reference Books

1. Natarajan. S (2006). Educational Management, Ram Publishers, Chennai.
2. Trivedi(2006), Management Education, Discovery Publishing House, New Delhi.
3. Soni Susmita Educational Management & Administration, Adhyayan Publishers, new Delhi (2007).

e-Resources

1. http://dsert.kar.nic.in/circulars/position/PlanningAndManagement.pdf
2. https://www.tripurauniv.ac.in/Content/pdf/Distance%20Education%20Notice/MA-Edu_IIndSem-EDCN802CEnglish_21072017.pdf
3. https://www.brown.edu/academics/education-alliance/sites/brown.edu.academics.education-alliance/files/publications/act_research.pdf

Course Outcomes

On completion of the course, students should be able to do

CO1 develop an Institutional plan
CO2 administrate the class
CO3 exhibit the leadership qualities
CO4 supervise the academic and non-academic activities of the students
CO5 do action research related to school issues

Mapping of COs with PSOs:

PSO / CO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	**Average**
CO1	3	2	2	2	3	1	**2.2**
CO2	2	3	3	2	3	3	**2.7**
CO3	2	2	2	2	2	2	**2**
CO4	3	3	3	2	2	3	**2.7**
CO5	2	3	2	2	2	2	**2.2**
Average	**2.4**	**2.6**	**2.4**	**2**	**2.4**	**2.2**	**2.3**

21EDNU0409: PRACTICES IN INCLUSIVE EDUCATION

Semester	IV	Course Code	21EDNU 0409
Course Title	Practices in Inclusive Education		
No. of Credits	04	No. of Contact Hours per Week	4 Hours
New Course / Revised Course	Revised Course	If revised, % of revision effected	36%
Category	Core		
Scope of the Course	: 1. Employability 2. Value added course in teacher education field		
Cognitive Levels addressed by the course	: K-1 (Remember) K-2 (Understand) K-3 (Apply) K-4 (Analyze) K-5 (Evaluate)		

Course Objectives:

The Course aims to make prospective teachers

- enable the students to understand the concept, need, importance and emerging trends in the education of students with special needs.
- make the students familiarize with basic aspects of inclusive education
- provide adequate knowledge and skills about the causes, characteristics, identification and assessment of students with special needs.
- orient the teacher trainees in planning, development and implantation of different educational programmes to the students with special needs.
- develop deeper understanding and skills in the teacher trainees in the promotion of inclusive education practices to differently-abled students in regular schools.

Course Content:

Unit	Content	No. of Hours
I	**Concept of Inclusive Education** Inclusive Education: meaning and definition- nature and principles – characteristics and scopes – need and benefits - differences between disability, impairment and handicap - special education, integrated education and inclusive education - Recommendations given in NPE 1986, POA 1992 and PWD Act 1995, NPD 2006, NCF 2005 and SSA 2000 to education of students with disabilities/special needs - role of national institutions - NIMH, AIISH, AYJNISH, NIOH, NIMD, NIVH and RCI in the promotion of special education in India.	13
II	**Visual Impairment** Structure and functions of eye- blindness and low vision- causes of visual impairment- common eye diseases - prevention of visually impairment– characteristics of visually impaired – functional assessment of visually impaired - educational interventions: sensory training-concept formation-activities of daily living skills- orientation and mobility-learning through Braille	13
III	**Hearing Impairment** Human ear and process of hearing- relevant terms and classification of hearing impairment- barriers of hearing impaired in classroom – strategies for addressing communication barrier- educational interventions: curriculum adaptations-teaching literacy skills-teaching arithmetic	12
IV	**Mental Retardation** Mental Retardation: definition, classification and relevant terms- causes, early identification and preventions - characteristics- assessment: types, tools and areas of assessment – educational interventions: functional academic and social skill developments- assistive devices and adaptations –vocational training and life skill education	13
V	**Learning Disabilities** Learning disabilities: meaning, definition, types and characteristics – tools and assessment - characteristics and identification – interventional strategies in 3Rs - Curriculum adaptation and education of learning disabilities - giftedness: concept and meaning - characteristics, identification and education for gifted children.	13

Text Books

1. Chintamani Kar (2003). *Exceptional Children: Their Psychology and Education,* Sterling Publishers.
2. Manju Gupta (2007). *Special Education* KSK Publishers and Distributors, New Delhi.

Reference Books

1. Agarwal.R & Rao, BVLN (2010). *Learning Disabilities: Teaching Learning Strategies*. Shipra Publications, New Delhi.
2. Dhawan.M.L. (2005). *Learners with Special Needs*. Mehta Offset Press, New Delhi.
3. Peterson, M.J. & Hittie.M.M. (2003). *Inclusive Teaching: Creating Effective School for all Learners*, Allyn & Bacon Publishers, USA.
4. Parijit Kotwal (2008). *Special Education*, Authors Press, New Delhi.

E-Resources:

1. https://www.unicef.org/education/inclusive-education
2. https://dsel.education.gov.in/sites/default/files/publication/modulea4.pdf
3. https://dsel.education.gov.in/sites/default/files/publication/module5.pdf
4. https://www.education.gov.in/en/sites/upload_files/mhrd/files/upload_document/Confluence.pdf

Course Outcomes:

On completion of the course, students should be able to do

CO1 Enable the students to understand the concept, need, importance and emerging trends in the education of students with special needs.

CO2 Provide adequate knowledge and skills about the causes, characteristics, identification and assessment of students with special needs.

CO3 Orient the teacher trainees in planning, development and Implantation of different educational programmes to the students with special needs.

CO4 Develop deeper understanding and skills in the teacher trainees in the promotion of inclusive education practices to differently abled students in regular schools.

CO5 Develop deeper construct knowledge about Identification and Education for giftedness.

Mapping of COs with PSOs:

PSO / CO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	**Average**
CO1	3	3	2	2	3	3	**2.7**
CO2	3	2	2	2	3	2	**2.3**
CO3	2	3	3	2	2	2	**2.3**
CO4	3	3	2	3	2	2	**2.5**
CO5	3	3	3	2	3	3	**2.8**
Average	**2.8**	**2.8**	**2.4**	**2.2**	**2.6**	**2.4**	**2.5**