



SCHOOL OF EDUCATION & LIBRARY SCIENCE

Bachelor of Education (B.Ed.)

SEMESTER-II

Don *Bim* *Atim* *Aathala*

EKLAVYA UNIVERSITY, DAMOH (M.P)

Scheme of Examination

B.Ed.-Sem II

Subject wise distribution of marks and corresponding credits

S.No.	Subject Code	Subject Name	Maximum Marks Allotted						Total Marks	Contact Periods Per Week			Total Credits
			Theory Slot		Assignment/ Attendance	Practical Slot		L		T	P		
			Final	Mid Sem		End Sem	Lab work/ sessional						
1	BBEDU20S201	Learning and Teaching	60	30	10	0	0	0	6	0	0	6	
	Pedagogy of School Subject: Part -I (Any One)												
	BBEDU20S202	Pedagogy of School Subject: Part-I (Hindi)											
	BBEDU20S203	Pedagogy of School Subject: Part-I (English)	60	30	10	0	0	0	6	0	0	6	
	BBEDU20S204	Pedagogy of School Subject: Part-I (Sanskrit)											
2	BBEDU20S205	Pedagogy of School Subject: Part-I (Physical Science- Physics/ Chemistry)											
	Pedagogy of School Subject: Part -II (Any One)												
	BBEDU20S206	Pedagogy of School Subject: Part -II (Biology)											
	BBEDU20S207	Pedagogy of School Subject: Part -II (Mathematics)	60	30	10	0	0	0	6	0	0	6	
	BBEDU20S208	Pedagogy of School Subject: Part -II (Social Science- History/ Civics/ Economics/ Geography)											
3	BBEDU20S209	Pedagogy of School Subject: Part -II (Commerce)											
	BBEDU20S210	Language across the Curriculum	60	30	10	0	0	0	6	0	0	6	
	BBEDU20S211	Drama and Arts in Education - I	0	0	0	60	40	40	8	0	4	12	
	Total		240	120	40	60	40	40	32	0	4	36	
	Induction programme of three weeks(MC): Physical activity, Creative Arts, Universal Human Values, Literary, Proficiency Modules, Lectures by Eminent People, Visits to local Areas, Familiarization to Dept./Branch & Innovations.												

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Course Code	LEARNING AND TEACHING (Second Semester)			L	T	P	C
BBEDU20S201				6	0	0	6
Pre-requisite	Nil			Syllabus version			
				100 Marks			
Course Objectives							
<ul style="list-style-type: none"> To become aware of different contexts of learning and situate schools as a special environment for learning. To reflect on their own implicit understanding of the nature and kinds of learning. Gain an understanding of different theoretical perspectives on learning with a focus on cognitive views of learning as well as social-constructivist theories. Explore the possibilities of an understanding of processes in human cognition and meaning- making them as basis for designing learning environments and experiences at school. Appreciate the critical role of learner's based on differences and contexts in making meanings and hence draw out implications for schools and teachers. 							
Course Outcome							
<ul style="list-style-type: none"> Understand the psychological and socio-cultural dimensions of individual differences. Know and understand the individual differences based on range of cognitive abilities. Explain the concept of learning and factors influencing learning. Understand the theories of learning of Skinner, Piaget and Vygotsky in relation to their educational implications. Evaluate teaching as a complex activity and its types, Maxims, Strategies, Methods, Techniques and Skills. Develop an understanding of the modalities of teaching and instruction. Critically analyze teaching as a profession and role of teacher. 							
Student Learning Outcomes (SLO)							
<ul style="list-style-type: none"> Students acquired the science of learning habit through education. 							
Unit-I	Theoretical Perspectives On Learning						18 Hrs
	<ul style="list-style-type: none"> ➤ Implicit knowledge and beliefs about learning (demystifying misconceptions) ➤ Perspectives on human learning: Behaviorist (conditioning paradigm in brief), Cognitivist, information-processing view, humanist, social-constructivist (drawing selectively on the ideas of Skinner, Piaget, Rogers, Vygotsky) ➤ Concepts and principles of each perspective and their applicability in different learning situations 						
Unit-II	Role of Learner in Learning						18 Hrs
	<ul style="list-style-type: none"> ➤ Role of learner in various learning situations as seen in different theoretical perspectives ➤ Role of teacher in teaching-learning situations: a) transmitter of knowledge, b) model, c) facilitator, d) negotiator, e) co-learner (The focus is on building understanding of different psychological perspectives of learning and helping student teachers to learn to apply them in different learning situations) ➤ Distinctions between learning as 'construction of knowledge' and learning as 'transmission and reception of knowledge' 						
Unit-III	Learning In 'Constructivist' Perspective						18 Hrs
	<ul style="list-style-type: none"> ➤ Social-constructivist perspective (also Bruner and Ausubel's perspective) and applications of Vygotsky's ideas in teaching 						

	<ul style="list-style-type: none"> ➤ Understanding processes that facilitate 'construction of knowledge': Experiential learning and reflection, Social mediation, Cognitive negotiability, Situated learning and cognitive apprenticeship, Meta-cognition. 	
Unit-IV	<ul style="list-style-type: none"> ➤ Learning In 'Constructivist' Perspective ➤ Creating facilitative learning environments ➤ Teachers' attitudes, expectations: enhancing motivation, positive emotions, self-efficacy, collaborative and self regulated learning (The focus is on learning as a constructive rather than a reproductive process. The learner- centered orientation has implications for understanding learning as contextual and self-regulated process and following suitable classroom practices) 	18 Hrs
Unit-V	<p>Individual Differences Among Learners</p> <ul style="list-style-type: none"> ➤ Dimensions of differences in psychological attributes: cognitive abilities, interest, aptitude, creativity, personality, values ➤ Understanding learners from multiple intelligences perspectives with a focus on Gardner's theory of multiple intelligences ➤ Implications for teaching-learning in the light of changing concept of intelligence, including emotional intelligence ➤ Differences in learners based on predominant 'learning styles'. ➤ Differences in learners based on socio-cultural contexts: Impact of home languages of learners' and language of instruction, impact of differential 'cultural capital' of learners. ➤ Understanding differences based on a range of cognitive abilities, learning difficulties, slow learners and dyslexics, intellectual deficiency, intellectual giftedness ➤ Implications for catering to individual variations in view of 'difference' rather than 'deficit' perspective (The focus is on understanding the differential learning needs of the learners with regard to abilities, learning styles, language, socio-cultural differences/ disadvantage, learning difficulties and their implications for classroom practices and teaching) 	18 Hrs
# Mode: Flipped Class Room, Case Discussion, Lectures		
Text Book(s) & Reference Books		
<ul style="list-style-type: none"> • Aggarwal, J.C. Essential of Educational Psychology, Vikas Publishers, Delhi, 1998 • Bhargava, Mahesh, Introduction of Exceptional Children, Sterling Publishers, New Delhi, 1994. • Bhatia, H.R., A Text Book of Educational Psychology, Delhi: McMillan Co., New Delhi, 1977 • Bhatia, K.K. Educational Psychology and Techniques for Teaching, Kalyani Publishers, Ludhiana, 1994. • Chauhan, S.S. Advanced Educational Psychology, Vikas Publishing New Delhi, 1996 • Dandapani, S., Advanced Educational Psychology. New Delhi. Anmol Publications Pvt.Ltd., 2000 • DeCecco, John P., Psychology of Learning and Instruction, Prentice Hall, New Delhi, 1987. • Drescoll, Mercy P.M Psychology of Learning for Instruction, Allyn and Bacons, USA, 1993 • Eshwar, H.S. and Nataraj P., Shaikshanika Manovijnana, Parichaya: Bhaga I and II, Institute of Kannada Studies, Union of Mysore, Mysore, 1985 • Gagne, R.M. Conditions of Learning and Theory of Instruction, 4th Edition, Holt Rinehart and Winston, New York, 1977 		

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Course Code	PEDAGOGY OF A SCHOOL SUBJECT: PART-I (Hindi)	L	T	P	C
BBEDU20S202		6	0	0	6
Pre-requisite	Nil	Syllabus version			
		100 Marks			
Course Objectives					
<ul style="list-style-type: none"> • Appreciate the importance of teaching Hindi as a second/ third Language. • Help the Students to understand the aims and objectives of teaching Hindi. • Help pupils to acquire basic skills of language teaching, aims/ objectives. • Know the different methods of teaching. • Prepare a lesson notes and teach accordingly. • Appreciate and use of modern educational media. 					
Course Outcome					
<ul style="list-style-type: none"> • Understand the concept, nature and scope of disciplines & subjects. • Appreciate the various perspectives that have their bearing on the emergence and evolution of languages as a discipline. • Understand the inter-link between languages as disciplines and as a school subject. 					
Student Learning Outcomes (SLO)					
<ul style="list-style-type: none"> • Student learned to read through various teaching methods. • Students learned to use new modern methods. 					
Unit-I	Perspectives of Hindi Language, Aims and Objectives of Teaching Hindi- I				18 Hrs
	<ul style="list-style-type: none"> ➤ Meaning and concept of language, Nature and importance of language ➤ Three language formula and Hindi, Place of Hindi in the Secondary School Curriculum of M.P., Present position of Hindi in India, in the constitution, in the life of Indian people 				
Unit-II	Perspectives of Hindi Language, Aims and Objectives of Teaching Hindi- II				18 Hrs
	<ul style="list-style-type: none"> ➤ Aims of teaching Hindi as a second/ third language: Functional aims of Hindi Teaching, Cultural Aims of Hindi Teaching, National and International Aims of Hindi Teaching ➤ Instructional objectives with practical and theoretical background ➤ Writing of instructional objectives of Hindi Teaching ➤ Modification of Objectives in terms of behavioural changes 				
Unit-III	Planning Lessons, Resource Units, Unit Plan, Drill Lessons				18 Hrs
	<ul style="list-style-type: none"> ➤ Planning of prose, poetry and Grammar lessons ➤ Processing of lesson notes and micro lesson plans ➤ Meaning and importance of a Unit plan and administration ➤ Resource Units- Use and implications ➤ Plan and process of lessons in Practice teaching. 				
Unit-IV	Language Skills				18 Hrs
	<ul style="list-style-type: none"> ➤ Development of language skills: Listening- objectives and importance: activities for its development ➤ Speaking: objectives, activities for its development, role of learning by heart, role-play, extempore and prepared speeches, debates, languages games, substitution table need for correct pronunciation, Remedial Measures ➤ Reading: objectives, Types of reading silent and loud, intensive 				

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	<p>methods of teaching, reading</p> <ul style="list-style-type: none"> ➤ Writing: objectives, Characteristics of handwriting, dictation Composition, Objectives Types, Oral, written and picture composition, Free and guided composition ➤ Translation: objectives, Importance, Characteristics of good translation 	
Unit-V	<p>Curriculum Design</p> <ul style="list-style-type: none"> ➤ Principles of Curriculum construction of Hindi ➤ Curriculum Design in Hindi: Subject centered, Learner Centered, Problem centered, Transaction of curriculum/ Co-curricular, Extra-curricular activities pertaining to teaching and learning ➤ Curriculum of prose, poetry and composition: Prose- Ancient/ Medieval/ Modern prose versions, Poetry- Bhakti period, Ritti period, Modern period ➤ Composition: Exercises, Assignments and remedial teaching activities and Grammar, Translations, Curriculum development and evaluation. 	18 Hrs
# Mode: Flipped Class Room, Case Discussion, Lectures		
Text Book(s) & Reference Books		
<ul style="list-style-type: none"> • Bhai.Y (1978) Hindi Bhasashikshan. Vinod Pustak Mandir Agra. • Bhasha Vishesshank Patrick (1980) Department of Education, Rajasthan , Bikaner • Chaturvedi, V.S. (1999) Adhapan Kala. Varanasi: Ggopinath Bhargav Nand Kishor and Sons. • Jha, L. (1940) Bhasha Shikshan Paddhathi. Allahabad: N.G. Saigal. U.P Press. 		
Practicum		
<ul style="list-style-type: none"> • Review of Books – 8, 9 standard school text books. • Resource Unit Uses. • Unit plan processing. • A study of an Author / Poet. • Developing Linguistics Skills. 		
Assignments (any one)		
<ul style="list-style-type: none"> • Solving grammar exercise of 8th and 9th Standard Text books of second language Hindi/Third Language. Hindi • Preparing crossword puzzles on technical terms, difficult terms of prescribed Hindi Text Books. • Report on constitutional provisions – provided to Hindi and the implication. (Note: Records should be maintained). 		
Seminar Topics (any one)		
<ul style="list-style-type: none"> • Preparing scheme of assessment, A study of an author / poet, Developing Linguistics Skills. • System our examination, Importance of teaching materials for effective teaching. 		

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Course Code	PEDAGOGY OF A SCHOOL SUBJECT: PART-I (English)			L	T	P	C
BBEDU20S203				6	0	0	6
Pre-requisite	Nil			Syllabus version			
				100 Marks			
Course Objectives							
<ul style="list-style-type: none"> To master the different techniques, devices of the Second language structure, sounds and vocabulary. To understand the status of English language. To distinguish between different approaches and methods of teaching English and their use in the classroom. Acquire the basic skills of language learning. Plan and execute of different types of lessons in prose, poetry according to classroom situations. To appreciate the importance and use of suitable audio-visual aids in class room situations. To know the principles of curriculum construction. To prepare and use appropriate tools of evaluation to measure the linguistic abilities of the pupils. To realize his/ her responsibilities as language teacher and pursue towards the aims of professional growth. To guide the students to use the language correctly. 							
Course Outcome							
<ul style="list-style-type: none"> Understand the importance of teaching English in India. Justify the place of English language in school curriculum. Understand the aims and objectives of teaching English language at secondary and higher secondary stage. Understand and make use of principles of English language teaching. Be familiar with different methods and approaches of teaching English. Understand the importance and concept of various skills of English language. Select appropriate teaching strategy for teaching various skills of English language. Understand and appreciate various qualities of an ideal English teacher and text book of English language, design effective evaluation strategy for evaluating various language competencies of English language. 							
Student Learning Outcomes (SLO)							
<ul style="list-style-type: none"> Student learned the teaching method through English language teaching. 							
Unit-I	Nature of English Language						18 Hrs
	<ul style="list-style-type: none"> ➤ English Language: its nature and structure, Meaning of language, Functions of language ➤ Informative, expressive and Directive Linguistic Principles. ➤ Structure of English Language: phonological, morphological, Syntactic, Semantic and graphic (a brief explanation of the concepts) 						
Unit-II	Aims and Objectives of Teaching English						18 Hrs
	<ul style="list-style-type: none"> ➤ Aims and objectives of teaching English at the Secondary School level as first and second language ➤ English as a library language, link language and international language ➤ Position of English in India before and after Independence ➤ The three language formula its meaning and scope 						

Unit-III	Instructional design of Teaching English Language <ul style="list-style-type: none"> ➤ Teaching of Prose: detailed and non-detailed, Objectives, Methods and Approaches steps in lesson planning ➤ Teaching of poetry: Objectives, Methods and Approaches, Steps in lesson planning ➤ Teaching of Grammar: Objectives, Formal and Functional, Methods of teaching grammar ➤ Use of mother tongue in teaching of English, different occasions for its effective use, Preparation of Unit plan, Resource Unit 	18 Hrs
Unit-IV	Methods, Approaches to Develop English Language Skills <ul style="list-style-type: none"> ➤ Psychological principles of learning English as a foreign language ➤ Methods and approaches of Teaching English: Grammar Translation Method, Direct Method, Bilingual method, Structural approach- Dr. WEST method, Communicative approach. 	18 Hrs
Unit-V	Methods, Approaches to Develop English Language Skills <ul style="list-style-type: none"> ➤ Development of language skills: listening- objectives and importance, activities for its development ➤ Speaking: Objectives, Activities for its development, role of learning by heart, role-play, extempore and prepared speeches, debates, language games, substitution table need for correct pronunciation, and defects in pronunciation, Remedial Measures ➤ Reading: Objectives, Types of reading, silent and a loud, intensive, methods of teaching reading ➤ Writing: Objectives, Characteristics of handwriting, dictation ➤ Composition: Objectives, Types (oral, written and picture composition), Free and guided composition ➤ Translation: Objectives, Importance, Characteristics of good translation 	18 Hrs
# Mode: Flipped Class Room, Case Discussion, Lectures		
Text Book(s) & Reference Books		
<ul style="list-style-type: none"> • Ahuja R.L. (2000) Teaching of English as a Foreign Language - Indian Press Publications Allahabad. • Allan C, R (1971) Teaching English as a Second Language. New-Delhi. McGrawhill. • Allen H.B. and Compell P.N.(1979) Readings in Teaching English as a Second Language • Baruah T.C. (1984) The English Teachers Handbook. Sterling Publishers. • Billows: F.L. (1961) The Techniques of Language Teaching: London, Longman. • Bright J. A. and McGregor C.P. (1970). Teaching English as Second Language. London, Eases. 		

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Course Code	PEDAGOGY OF A SCHOOL SUBJECT: PART-I (Sanskrit)			L	T	P	C
BBEDU20S204				6	0	0	6
Pre-requisite	Nil			Syllabus version			
				100 Marks			
Course Objectives							
<ul style="list-style-type: none"> Understand the importance of Sanskrit language and its contribution to Indian culture and emotional integration. Understand the aims and objectives of teaching Sanskrit and state them in the form of specific behavioral changes. Prepare objective based lesson plans and implement them. Understand the basic skills of language learning. Understand the principles of curriculum construction in Sanskrit. Understand the different methods of teaching Sanskrit and use them in his practice teaching lessons. Understand the importance of appropriate instructional material and use them in his practice teaching lessons. Understand the importance of Language Laboratory. Understand the importance of evaluation, prepare and use different tools of evaluation in language learning. Understand the importance of co-curricular activities in language learning. Imbibe the special qualities of Sanskrit teacher. 							
Course Outcome							
<ul style="list-style-type: none"> Develop an understanding of the nature of language system. Understand the role and importance of Sanskrit and its cultural background. Know the place of Sanskrit in curriculum. Understand about the methods of teaching Sanskrit. Understand and apply the action research in classroom. Construct the diagnostic test and provide remedial teaching to the students. Develop skills of making teaching learning process experiential and joyful. 							
Student Learning Outcomes (SLO)							
<ul style="list-style-type: none"> A learned to read the Sanskrit subjects with various co-curricular activities as well as methods 							
Unit-I	Sanskrit Language						18 Hrs
	<ul style="list-style-type: none"> Nature and Importance of Sanskrit language Contributions of Sanskrit to other Indian Languages, to Indian culture & tradition and to emotional integration 						
Unit-II	Place of Sanskrit in the Secondary School Curriculum						18 Hrs
	<ul style="list-style-type: none"> Aims & Objectives of teaching Sanskrit with reference to three language formula Instructional Objectives: Specifications of each objective in the form of specific behavioral change 						
Unit-III	Lesson Plan in Sanskrit Language						18 Hrs
	<ul style="list-style-type: none"> Planning lesson plans in prose, poetry, grammar and composition Unit plan: importance, characteristics, format Resource unit: importance, characteristics, format Micro lesson plan: importance, format, practice. 						
Unit-IV	Development of Language Skills, Curriculum Design- I						18 Hrs
	<ul style="list-style-type: none"> Listening: importance, activities for its development 						

	<ul style="list-style-type: none"> ➤ Speaking: importance, characteristics of good speaking, activities for its development ➤ Reading: mechanics of reading, objectives, different kinds of reading- silent reading and loud reading. ➤ Writing: importance of good handwriting, specialties of the Devanagari script, causes of spelling mistakes, remedial measures. 	
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Unit-V	Development of Language Skills, Curriculum Design- II	18 Hrs
	<ul style="list-style-type: none"> ➤ Principles of curriculum construction of Sanskrit ➤ Curriculum design in Sanskrit: subject centered, learner centered, problem centered ➤ Transaction of curricular/ co-curricular activities ➤ Curriculum development and evaluation 	

Mode: Flipped Class Room, Case Discussion, Lectures

Text Book(s) & Reference Books

- Bhai.Y (1978) Hindi Bhasashikshan. Vinod Pustak Mandir Agra.
- Bhasa Vishesshank Patrick (1980) Department of Education, Rajasthan , Bikaner
- Chaturvedi, V.S. (1999) Adhapan Kala. Varanasi: Ggopinath Bhargav Nand Kishor and Sons.
- Jha, L.(1940) Bhasha Shikshan Paddhbat. Allahabad: N.G. Saigal. U.P Press.
- John, D. (1953) The Study of Language. Harward University Press.
- Keshav Prasad (1984) Hindi Shikshan. Delhi; Dhanapatrai and Sons
- Kothari Commission Report (1968) Govt. of India, New Delhi
- Narang and Bhatia (1987) – Hindi – Shikshan Vidhi.. Ludhiana : Prakash Brothers.
- Nirajkumar Sinha (1990) Madhyamik – Vidyalayome Hindi Shiksha. Jaipur: Hindi Grantha Academy.
- Robert. L. (1964) Language Teaching: A Teacher’s Book. New York: Megrewtill.
- Ryburu, W.M. (1950) The Teaching of the Mother Tongue. Madras: Oxford University Press.
- Sattigeri, K.I (1997) Nutan Hindi Shikshan. Belgaum: Vijaya Sattigeri.
- Srivastava, B.D. (1968) The Structural Approach to the Teaching of English. Agsa: Ram Prasad and Sons.

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Course Code	PEDAGOGY OF A SCHOOL SUBJECT: PART-I (Physical Science: Physics and Chemistry)	L	T	P	C
BBEDU20S205		6	0	0	6
Pre-requisite	Nil	Syllabus version			
100 Marks					
Course Objectives					
<ul style="list-style-type: none"> Understand the nature, scope and importance of Physical science with special reference to secondary school content. Understand the aims and objectives of teaching physical science. State the specific behavioral changes under each objective. Understand and make use of different approaches & methods of teaching Physical science. Prepare objective based lesson plans and use them in their internship. Understand and employ several teaching techniques helpful to develop scientific attitude and scientific method. Plan, use and maintain the physical science laboratory systematically. Understand the principles of text-book construction. Prepare and use different tools of evaluation to assess the achievements of students in physical science. Develop professionally by attending lectures of professional interest, reading journals, and magazines and enroll as members of professional organization. Organize co-curricular activities in science i.e. seminars, field trips, exhibitions discussions etc. through the science club. Apply the knowledge of physical science to develop scientific thinking and scientific outlook. Develop skills in analyzing the content in terms of concepts and in learning experiences. Construct and administer unit test, conduct experiments improves teaching aids. 					
Course Outcome					
<ul style="list-style-type: none"> Understand the structure and nature of science as a discipline. Understand the aims and curriculum framework of physical science teaching at secondary level. Understand the importance, purpose and basic element of unit planning/ lesson planning Develop and design appropriate (innovative and indigenous) teaching aids, remedial and enriched programs. Understand and Practice the application of core teaching skills Understand the application of appropriate evaluation techniques in physical science. 					
Student Learning Outcomes (SLO)					
<ul style="list-style-type: none"> Student learned to read physical and chemistry subjects through methods of teaching 					
Unit-I	Meaning, Nature and Impact of Physical Science				18 Hrs
	<ul style="list-style-type: none"> ➤ Concept of science, Science as process and science as a product ➤ Nature and Scope of Physical Science ➤ Impact of Science and Technology on modern living ➤ Scientific Attitude: Meaning, definition and importance ➤ Qualities of a person who possesses scientific attitude. ➤ Scientific Method: Meaning, importance and steps involved (with an illustration) 				
Unit-II	Aims and Objectives of Teaching Physical Science				18 Hrs
	<ul style="list-style-type: none"> ➤ Aims of teaching Physical science in Secondary school: Personal 				

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	<p>development aim, Learner's academic and process skills development aim, Disciplinary aim and Cultural aim.</p> <p>Objectives of teaching Physical science at Secondary level</p> <ul style="list-style-type: none"> ➤ (To be Discussed keeping in view of the objectives of teaching Physical science enunciated in the physical science syllabi of secondary school of M.P.) Instructional objectives of teaching physical science and stating them in observable behavioral changes, Knowledge, Understanding, Application, Skill, Attitude, Interest, Appreciation 	
Unit-III	<p>Approaches of Teaching Physical Science</p> <ul style="list-style-type: none"> ➤ Enquiry Approach: Meaning, Uses with Illustrations, Advantages and disadvantages ➤ Inductive Approach: Meaning, disadvantages, Uses with Illustrations, Advantages ➤ Deductive Approach: Meaning, disadvantages, Uses with Illustrations, Advantages ➤ Problem Solving Approach: Meaning, Uses with Illustrations, Steps, Advantages and disadvantages 	18 Hrs
Unit-IV	<p>Methods of Teaching Physical Science</p> <ul style="list-style-type: none"> ➤ Demonstration Method: Meaning, uses, Advantages and disadvantages ➤ Lectures-Cum-Demonstration Method: Meaning, uses with Illustration, Advantages and disadvantages ➤ Laboratory Method: Meaning, uses with Illustration, Advantages and disadvantages ➤ Guided Discovery Method: Meaning, uses with Illustration, Advantages and disadvantages ➤ Biographical Method: Meaning, uses with Illustration, Advantages and disadvantages ➤ Individual Instruction Techniques and Active Learning Strategies ➤ Concept Mapping: Its use for summarizing a unit and evaluating students understanding 	18 Hrs
Unit-V	<p>Instructional Design, Resources and Teaching Aid for teaching Physical Science:</p> <ul style="list-style-type: none"> ➤ Lesson Planning: Meaning, Steps, Importance and Format of Lesson Plan according to active learning strategies ➤ Unit Plan: Meaning, Steps, Importance and Format of Lesson Plan ➤ Resource Unit: Meaning, Steps, Importance and Format of Lesson Plan ➤ Audio-Visual Aids (Preparation and Use), Charts, Models, OHP transparencies, Filmstrips, slides, Videotapes Films, Educational C.D.'s ➤ Mass Media: Television (T.V.), Radio - Meaning and importance. ➤ Community Resources and Self learning materials: Meaning and importance ➤ Physical Science Library: Importance & organizing of physical science library ➤ Sections of science library, Choice of book for science library 	18 Hrs
# Mode: Flipped Class Room, Case Discussion, Lectures		
Text Book(s) & Reference Books		
<ul style="list-style-type: none"> • Ahmed, Shaikti R. (1983) Management of Laboratory Science Programme: Report of 		

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Orientation Programme in Educational Planning and Administration, New Delhi; NIEPA Mimeo.

- Bhandula & Chand (1986) Teaching of Science, Prakash Brothers, Ludhina
- Bose, A. H. Sood, J.K. and Vaidya, N. (1970), Strategies in Science Education.
- Regional Institute of Education, Ajmer.
- Carin/Sund Teaching Science Through Discovery; C.E. Merrill Publishing Co.Londan.
- Cleaveland J. M. (1964) Physical Science C.E. Merrill Publishing Co., Ohio.
- Craig (1958) Science for the Elementary School Teacher; Ginn & Co., New York
- Das R. C. (1985) Science Teaching in Schools, Sterling Publishers, Pvt. Ltd., New Delhi.
- Fensham P. J. et. al.,(1994) The Content of Science : A Constructive Approach to its Teaching & Learning. The Falmer Press, Washington D.C.
- Gupta S. K. (1983) Technology of Science Education, Vikas Publishing House, Pvt. Ltd., New Delhi.

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Student Learning Outcomes (SLO)	
<ul style="list-style-type: none"> • Understand the nature and nature of science as a discipline. • Understand the aims and curriculum framework of physical science teaching at secondary level. • Understand the importance, purpose and basic elements of unit planning/ lesson planning. • Develop and design appropriate (innovative and indigenous) teaching aids, remedial and enriched programs. • Understand and practice the application of core teaching skills. • Understand the application of appropriate evaluation techniques in physical science. 	
18 hrs	<ul style="list-style-type: none"> • Teach students how to make lesson plans and work according to class situation
18 hrs	<ul style="list-style-type: none"> • Introduction to Teaching Biological Science • Biological Science: Meaning, Nature and Scope, Relationship between Biology & human welfare, Latest developments in the field of Biology
18 hrs	<ul style="list-style-type: none"> • Co-curricular Activities and Resources in Teaching Biological Science • The Science Laboratory: Need and importance, equipment, Bio-lab • Organizing the practical Work • Project Activities, Museum, Visiting Teachers, Museum, School garden • Preservation of specimens through preservation: Meaning, importance and steps • Meaning, importance and Organization of Co-curricular Activities • Bio-Science Club organization & its activities • Bio Science Exhibition field trips, Bio-Science Quiz, Nature Study • Field watching, Collection & Preservation of Specimens: Plants and Animals
18 hrs	<ul style="list-style-type: none"> • Aims and Objectives • Understand Cultural and Diversity Aims • Pedagogic Attitude and Training in Scientific Method

Course Code	PEDAGOGY OF A SCHOOL SUBJECT: PART-II (Biological Science)			L	T	P	C
BBEDU20S206				6	0	0	6
Pre-requisite	Nil			Syllabus version			
				100 Marks			
Course Objectives							
<ul style="list-style-type: none"> Understand the nature, scope & importance of Biological Sciences and get acquainted with ancient as well as modern developments in the field of Bio-Sciences. Understand the aims, objectives of teaching Bio-Science and will be able to state the objectives in behavioral terms. Acquaint with the resources for teaching Biology & their effective utilization. Understand and prepare the different types of test items for the evaluation of students' performance in Biology. Appreciate and inculcate the competencies and commitments needed for a biological science teacher. Plan & execute various curricular & co-curricular activities related to teaching of Bio-Science 							
Course Outcome							
<ul style="list-style-type: none"> Understand the structure and nature of science as a discipline. Understand the aims and curriculum framework of physical science teaching at secondary level. Understand the importance, purpose and basic element of unit planning/ lesson planning Develop and design appropriate (innovative and indigenious) teaching aids, remedial and enriched programs. Understand and practice the application of core teaching skills Understand the application of appropriate evaluation techniques in physical science. 							
Student Learning Outcomes (SLO)							
<ul style="list-style-type: none"> Teach students how to make lesson plans and work according to class situation. 							
Unit-I	Introduction to Teaching Biological Science						18 Hrs
	<ul style="list-style-type: none"> ➤ Biological Science: Meaning, Nature and Scope, Relationship between Biology & human welfare, Latest developments in the field of Biology 						
Unit-II	Co-curricular Activities and Resources in Teaching Biological Science						18 Hrs
	<ul style="list-style-type: none"> ➤ Bio Science laboratory: Need and importance, equipping, Bio-lab, Organizing the practical Work ➤ Project Activities: Aquarium, Viverium, Terrariums, Museum, School garden ➤ Preservation of specimen through plastination: Meaning, Importance and Steps ➤ Meaning, importance and Organization of Co-Curricular Activities ➤ Bio-Science Club: organisation & its activities ➤ Bio Science Exhibition Field trips, Bio-Science Quiz, Nature Study, Bird watching, Collection & Preservation of Specimens- Plants and Animals 						
Unit-III	Aims and Objectives						18 Hrs
	<ul style="list-style-type: none"> ➤ Utilitarian, Cultural and Disciplinary Aims ➤ Scientific Attitude and Training in Scientific Method 						

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