

1. Name of the Department: Education										
2. Course Name	TECHNIQUES OF TEACHING			L	T	P				
3. Course Code	ED 407			3	1	0				
4. Type of Course (use tick mark)				Core (v)	DE ()	FC ()				
5. Pre-requisite (if any)	Graduation in any discipline	6. Frequency (use tick marks)	Even (v)	Odd ()	Either Sem ()	Every Sem ()				
7. Total Number of Lectures, Tutorials, Practicals										
Lectures = 30			Tutorials = 10		Practical = Nil					
8. COURSE OBJECTIVES: The purpose of this undergraduate course is to impart basic and key knowledge of Educational techniques. By using the principal of learning and teaching students may enable themselves a better teacher. After successfully completion of course, the student will able explore subject into their respective dimensions.										
9. COURSE OUTCOMES (CO): <i>After the successful course completion, learners will develop following attributes:</i>										
COURSE OUTCOME (CO)		ATTRIBUTES								
CO1		Student will be able to know the concept characteristics and important teaching skills.								
CO2		Understand the classification of Bloom's taxonomy of Educational Objectives.								
CO3		Explain the various merits and demerits of various approaches to teaching.								
CO4		Apply various teaching methods in class room teaching.								
CO5		Describe uses of ICT in teaching and learning.								
CO6		Know Innovative methods of teaching.								
10. Unit wise detailed content										
Unit-1		Number of lectures = 08		Title of the unit: concept and objectives of teaching						
Concept and characteristics of good teaching. Micro-Teaching: Meaning, Concept and Micro-Teaching Cycle. Important teaching skills – Set-Induction , questioning , Reinforcement , Explanation ,Stimulus variation ,Black-Board , Illustration with example										
Unit-2		Number of lectures =08		Title of the unit: AIMS AND OBJECTIVES OF TEACHING :						
Need and importance of defining aims and objectives of teaching in terms of learning outcomes. Bloom's taxonomy of educational objectives. Factors affecting teaching and learning..										
Unit-3		Number of lectures = 08		Title of the unit: APPROACHES TO TEACHING						
Maxims of teaching: Known to unknown, simple to complex, easy to difficult, concrete to abstract, whole to part etc. Merits and demerits of various teaching methods: Lecture, Demonstration, Project, Problem-solving and Discussion, Inductive , Deductive, Heuristic.										
Unit-4		Number of lectures = 08		Title of the unit: INNOVATIVE TEACHING						
Use of ICT in teaching and learning. E-learning and changing nature of class-room. Collaborative learning: Meaning and Application Virtual Classroom: Meaning and Uses										
Unit-5		Number of lectures = 08		Title of the unit: PROGRAMMED LEARNING						
Programmed Learning: Meaning, Origin Linear programming: Meaning and Characteristic Branching programming: Meaning and Characteristic Mathetics programming: Meaning and Characteristic Development of Programme Learning Material										
11. CO-PO mapping										
COs	Attributes			PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	Student will be able to know the concept characteristics and important teaching skills.			3	3	2	2	2	1	2
CO2	Understand the classification of Bloom's taxonomy of Educational Objectives.			2	2	2	2	2	1	1
CO3	Explain the various merits and demerits of various approaches to teaching.			3	1	2	2	2	1	1
CO4	Apply various teaching methods in class room teaching.			3	3	1	2	3	2	1

CO5	Describe uses of ICT in teaching and learning.	3	1	1	2	3	2	1
CO6	Know Innovative methods of teaching.	2	3	2	3	3	3	1

3 Strong contribution, 2 Average contribution , 1 Low contribution

12. Brief description of self learning / E-learning component

<https://images.app.goo.gl/trnvhnAPAsRG2J5A6>

13. Books recommended:

- Bhatia, K. (2002), "The Principles and Methods of teaching", Doaba House, New Delhi.
- Chris, Kyriakon (1997), "Effective Teaching in Schools: Theory & Practice", Stanley Thornes Ltd.
- David Coulby and others (2011), "Preventing classroom Description: Policy, Practice and Evaluation in Urban Schools", Routledge Library edition, London.
- Day, Christopher (2004), "A Passion for Teaching", Routled gefalmer, London.
- Government of India (2000), National Curriculum Framework (NCF), NCERT, New Delhi.
- Government of India (2005), National Curriculum Framework (NCF), NCERT, New Delhi
- Woods, P. (2011), "Critical Events in Teaching and Learning", Routledge Library Edition, London.
- www.teacher.co.in

1.NameoftheDepartment:Education								
2.CourseName	Assessment of Learning			L	T	P		
3.CourseCode	ED408			3	1	0		
4.TypeofCourse(use tickmark)				Core(√)	DE()	FC()		
5.Pre-requisite(ifany)	Graduation in any Discipline	6.Frequency(usetick marks)	Even(√)	Odd()	EitherSem()	EverySem()		
7.TotalNumberofLectures,Tutorials,Practicals								
Lectures=30		Tutorials=10		Practical=Nil				
8. COURSEOBJECTIVES: The purpose of this graduate course is to impart theoretical and practical knowledge of Assessment. By studying the different types of measurement and techniques and process, students will be able to do measurement and evaluation. Students can draw conclusions and prediction about progress.								
9.COURSEOUTCOMES (CO): <i>Afterthesuccessfulcoursecompletion,learnerswilldevelopfollowingattributes:</i>								
COURSEOUTCOME(CO)		ATTRIBUTES						
CO1		Understand the concept, importance of Measurement & Evaluation, Levels of Measurement						
CO2		familiarize with new trends and innovations in Measurement & Evaluation						
CO3		Know the concept of Statistics and central tendency and its use in education						
CO4		use the different types of tool for measurement and evaluation, characteristics of good measuring tool						
CO5		Be acquainted the new reforms in examination system						
10.Unitwisedetailedcontent								
Unit-1	Numberoflectures=8	Titleoftheunit: Concept of Evaluation						
Concept of Measurement, Assessment andEvaluation, Need and Scope ofEvaluation, Distinction between the following :Measurement, Examination, Assessment and Evaluation, EvaluationApproaches: Formative–Summative,Continuous Comprehensive Evaluation :Need ,Relevance, ImplementationProcedure, Problems								
Unit-2	Numberoflectures=10	Titleoftheunit: Tools and Techniques of Evaluation						
Characteristics of good measuring instruments andfactors affectingthem, Reliability and Validity ofTools, Tools ofevaluation:-Quantitative – Written, Oral and Practical (Types of Questions: Short, Long, MCQs covering all three domains of Learning-Cognitive, Affective and Psychomotor) Qualitative – Observation, Introspection, Projectionand Sociometry, Use of these tools for internal assessment &maintaining cumulative records of learners inSchool								
Unit-3	Numberoflectures=6	Titleoftheunit: Statistical Methods and Interpretation of Scores						
History of Statistic, Need & Importance of Statistics in Evaluation, GraphicalRepresentation, Histogram, Frequency Polygon, Pi Charts, Percentile & Percentile rank (Meaning & Uses)								
Unit-4	Numberoflectures=8	Titleoftheunit: Central Tendency and Normal Probability Curve						
Measures of Central Tendency:- Mean, Median, Mode. (Meaning, Characteristics, use only) Normal Probability Curve:-Properties and Uses. (Skewness and Kurtosis (Meaning & Applications)								
Unit-5	Numberoflectures=10	Titleoftheunit: New Trends In Evaluation: Need and Use						
Questionbank, Gradingsystem, OnlineExamination, Open BookExamination, CreditSystem, Exam on Demand (meaning & usesonly)								
11.CO-POmapping								
COs	Attributes	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	Understand the concept, importance of Measurement & Evaluation, Levels of Measurement	3	3	1	2	2	1	1
CO2	familiarize with new trends and innovations in Measurement & Evaluation	3	3	1	2	2	1	1
CO3	Know the concept of Statistics and central tendency and its use in education	3	3	1	2	2	1	1
CO4	use the different types of tool for measurement and evaluation, characteristics of good measuring tool	2	3	1	2	2	1	1
CO5	Be acquainted the new reforms in examination system	2	3	1	2	2	1	1
3Strongcontribution,2Averagecontribution,1Lowcontribution								
12.Briefdescriptionofselflearning/E-learningcomponent								

13. Books recommended:

1. Kulshreshtha, A.K. (2006). "Teaching of Mathematics" R.Lall Book Depot, Meerut
2. Bhatnagar, A.B. (2010). "Teaching of Mathematics" R.Lall Book Depot, Meerut
3. Arora, S.K. (1998). "How to teach Mathematics" Shanti Publishers, Bhiwani
4. Thomas, A. S. (1993). Mathematics for Elementary Teachers (An Interactive Approach), Florida: HBJ Publishers
5. Rawat, M.S. "Teaching of Mathematics" Vinod Pustak Mandir, Agra
6. Siddhu, K.S. "Teaching of Mathematics" Sterling Publication, New Delhi
7. Kapur, J.N. (1991). Suggested Experiments in School Mathematics. New Delhi: Arya Book Depot
8. Jain, S. L. (1973). GanitShikshan. Jaipur: Hindi Granth Academy
9. Kapoor, J. N. (1988). Vidyalaya Ganikke Liye San Prayog. New Delhi: Arya Book Depot
10. Shankaran & Gupta, H. N. (1984). Content-cum-Methodology of Teaching Mathematics. New Delhi: NCERT.

1. Name of the Department: Education								
2. Course Name	METHOD OF TEACHING ENGLISH			L	T	P		
3. Course Code	ED409			3	1	0		
4. Type of Course (use tick mark)				Core ()	DE (√)	FC ()		
5. Pre-requisite (if any)		6. Frequency(use tick marks)	Even (√)	Odd ()	Either Sem ()	Every Sem ()		
7. Total Number of Lectures, Tutorials, Practicals								
Lectures = 35			Tutorials = 10		Practical = Nil			
8. COURSE OBJECTIVES: The course is aimed to develop the skills in English, which is necessary for grooming them into successful education graduate. The topics introduced will serve as basic tools for specialized studies in education field.								
9. COURSE OUTCOMES (CO): <i>After the successful course completion, learners will develop following attributes:</i>								
COURSE OUTCOME (CO)	ATTRIBUTES							
CO1	Understand about nature, concept of language; study problems in effective teaching of English.							
CO2	Understand different methods of teaching English.							
CO3	Expertise in different skills of learning a language.							
CO4	List and state importance of all teaching aids used in teaching English.							
CO5	Expertise in teaching of prose, poetry and grammar and prepare lesson plans for the same.							
10. Unit wise detailed content								
Unit-1	Number of lectures=09	BASIC CONCEPT OF ENGLISH LANGUAGE						
	<ul style="list-style-type: none"> Language: nature, concept, types (verbal & non-verbal), functions Concept of language learning and acquisition The aims and objective of teaching English as a second language at the secondary level. The position and role of English in India Problems in effective teaching of English as a second language in Indian school and their possible solutions. 							
Unit-2	Number of lectures=09	TEACHING OF ENGLISH - METHODS AND APPROACHES						
	<ul style="list-style-type: none"> Translation cum grammar method of teaching English Direct method of teaching English and its critical appraisal. Dr. West's Method of teaching English, types of reading ability, merits, demerits and criticism Structural approach to teaching English, Advantage and disadvantages. Communicative Approach to English, Advantage and disadvantages. Deductive and inductive approaches. 							
Unit-3	Number of lectures=09	TEACHING SKILLS						
	<ul style="list-style-type: none"> Teaching of oral skills-characteristics and objectives. Teaching of reading skills-characteristics, objectives, types of reading-intensive, extensive, silent and reading aloud with expression. Teaching of writing skills-characteristics, style of writing and methods of writing. 							
Unit-4	Number of lectures=09	AUDIO-VISUAL AIDS						
	<ul style="list-style-type: none"> Meaning and importance of teaching aids, Audio, Visual Aids, kinds and uses. Language Laboratory and Its importance in teaching English. 							
Unit-5	Number of lectures=09	TEACHING OF PROSE, POETRY, GRAMMAR AND TEXT BOOKS FOR TEACHING ENGLISH						
	<ul style="list-style-type: none"> Teaching of Grammar -place of grammar in the study of English. Teaching of prose, poetry and grammar-aims and objectives. Lesson planning – teaching of prose, poetry and grammar. Textbook: its characteristics, importance and advantage of English Text-books. Limitation of existing text-books, analysis and evaluation of textbook. 							
11. CO-PO mapping								
COs	Attributes	P O 1	P O 2	P O 3	P O 4	P O 5	P O 6	P O 7
CO1	Understand about nature, concept of language; study problems in effective teaching of English.	1	3	1	2	2	1	2
CO2	Understand different methods of teaching English.	1	3	1	2	2	1	2
CO3	Expertise in different skills of learning a language.	1	3	1	2	2	1	2
CO4	List and state importance of all teaching aids used in teaching English.	2	3	1	2	2	1	2
CO5	Expertise in teaching of prose, poetry and grammar and prepare lesson plans for the same.	1	3	1	2	2	1	2
3 Strong contribution, 2 Average contribution, 1 Low contribution								
12. Brief description of self-learning / E-learning component								
<ul style="list-style-type: none"> https://drive.google.com/open?id=1Zb_zL3ywprYIUgbeJK_fxIfiEdfj5tUj&authuser=0 https://drive.google.com/open?id=19kwL2sXBIIITg7RYLK_rxuW5qmsNDLCpJ&authuser=0 https://drive.google.com/open?id=1hrxWwR4DLekomJqtQR65fSaxV-5-RtDE&authuser=0 https://drive.google.com/open?id=15HeutE-O_L5PICmgn3Hox2t61rAcKzS8&authuser=0 https://drive.google.com/open?id=1uISdT0cd2wCq1B9Wjdhr-aRiJfZo4CLn&authuser=0 								

- <https://drive.google.com/open?id=1T1RwQ9qCzlrp4lVFT8Vv6lBl1wEka9K6&authuser=0>
- <https://drive.google.com/open?id=1aqKZnrC-hM5OSo0nNlX0tqEQQZhhfSx &authuser=0>
- <https://drive.google.com/open?id=1JCfEuDZpUW14ffJWCeQhTpNJCacJmGwa&authuser=0>

13. Books recommended: CO1, PO2, BT2

1. Allen B. Harold Campbell N : Teaching English as a second language, Tata-Mac-graw Russel Hill publishing Co. Ltd, Bombay-New Delhi (1972)
2. Bright, G.A.& McGregor G.P. : Teaching English as a Second Language, Longmans (1972)
3. Brumgit C.J., Johnson, K. : The Communicative Approach to Language Teaching: ELBS; Oxford University Press, Hong-Kong, 1979.
4. O'Connor, J.D. : Better, English Pronunciation: ELBS, Cambridge University Press, Great Britain, 1977.
5. French, F.G. : Teaching English as an International Language; Oxford University Press, London, 1975.
6. Hornby, A.S. : The Teaching of structured words and Sentence Pattern, Stage I-IV: Oxford University Press, London, 1991.
7. Jain, R.C. Sharma, C.K. : Essentials of English Teaching: Vinod Pustak Mandir, Agra.
8. Kohli, A.L. : Techniques of Teaching English: Dhanpat Rai & Sons, Delhi, 1996.
9. Lado, Robert : "Language Teaching: A Scientific Approach, McGraw Hill, Inc., New York
10. Lado, Robert : Language Testing: The Construction and use of Foreign Language Test, Language, 1961.
11. Pandey, K.P. & Amita : The Teaching of English in India, Vishwavidyalaya Prakashan, Varanasi,

1. Name of the Department: Education						
2. Course Name	हिन्दी शिक्षण विधि			L	T	P
3. Course Code	ED410			3	1	0
4. Type of Course (use tick mark)				Core ()	DE (v)	FC ()
5. Pre-requisite (if any)	Graduation in any discipline	6. Frequency (use tick marks)	Even (v)	Odd ()	Either Sem ()	Every Sem ()
7. Total Number of Lectures, Tutorials, Practicals						
Lectures = 30		Tutorials = 10		Practical = Nil		
8. COURSE OBJECTIVES: The purpose of this undergraduate course is to impart basic and key knowledge of Teaching Hindi. By using the Principles of teaching Student may acquire necessary teaching skills for their future perspective. After successfully completion of course, the student will able explore subject into their respective dimensions.						
9. COURSE OUTCOMES (CO): <i>After the successful course completion, learners will develop following attributes:</i>						
COURSE OUTCOME (CO)		ATTRIBUTES				
CO1		भाषा के महत्व एवं कार्यों से परिचित हो सकेंगे।				
CO2		हिन्दी भाषा एवं साहित्य के प्रति धनात्मक अभिवृत्ति को अपने व्यवहार में प्रदर्शित कर सकेंगे।				
CO3		. समाज में साहित्य के स्थान से परिचित हो सकेंगे।				
CO4		अपने भावों को समुचित प्रकार से अभिव्यक्त कर सकेंगे।				
CO5		गद्य एवं पद्य को उचित आरोह-अवरोह एवं लय के साथ वाचन कर सकेंगे				
CO6		गद्य एवं पद्य को व्याकरण नियमों के अनुसार लिख सकेंगे।				
CO7		गद्य एवं पद्य को मौन वाचन कर सकेंगे।				
CO8		गद्य, पद्य एवं व्याकरण की पाठ-योजना का निर्माण कर सकेंगे।				
CO9		गद्य, पद्य एवं व्याकरण की पाठ-योजना का मूल्याङ्कन कर सकेंगे।				
10. Unit wise detailed content						
Unit-1	Number of lectures = 08	Title of the unit: भाषा: सम्प्रत्यय एवं भूमिका				
भाषा का महत्व एवं उसके कार्य। हिन्दी भाषा का माध्यमिक स्तर के पाठ्यक्रम में स्थान। राष्ट्रभाषा के रूप में हिंदी की प्रासंगिकता एवं चुनौतियाँ। आदर्श हिन्दी शिक्षक के गुण।						
Unit-2	Number of lectures =08	Title of the unit: पाठ योजना: अर्थ एवं निर्माण				
पाठ योजना निर्माण के लाभ गद्य पाठ योजना के पद						
Unit-3	Number of lectures = 08	Title of the unit: हिन्दी शिक्षण में विभिन्न पाठ-योजनाएं				
पद्य पाठ योजना के पद व्याकरण पाठ योजना के पद रचना- शिक्षण पाठ के पद						

Unit-4	Number of lectures = 08	Title of the unit: हिन्दी शिक्षण हेतु विभिन्न विधियाँ
<p>आगमन एवं निगमन विधि: अर्थ एवं इनके मध्य अंतर श्रव्य- दृश्य सामग्री: अर्थ, महत्व एवं प्रकार भाषा प्रयोगशाला : अर्थ एवं महत्व पाठ्य - सहगामी क्रियाएं: अर्थ, महत्व एवं शिक्षक की भूमिका</p>		

Unit-5	Number of lectures = 08	Title of the unit: हिन्दी शिक्षण में मापन एवं मूल्यांकन
<p>मापन एवं मूल्यांकन : अर्थ, मापन मूल्यांकन के मध्य अंतर एवं सम्बन्ध वस्तुनिष्ठ परीक्षण : अर्थ, कक्षा शिक्षण में उपयोगिता निबंधात्मक परीक्षा : अर्थ, कक्षा शिक्षण में उपयोगिता नील पत्रक (ब्लू-प्रिंट) : अर्थ एवं निर्माण</p>		

11. CO-PO mapping								
COs	Attributes	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	भाषा के महत्व एवं कार्यों से परिचित हो सकेंगे।	3	1	1		2	1	2
CO2	हिन्दी भाषा एवं साहित्य के प्रति धनात्मक अभिवृत्ति को अपने व्यवहार में प्रदर्शित कर सकेंगे।	3	1	2		2	1	2
CO3	. समाज में साहित्य के स्थान से परिचित हो सकेंगे।	3	1	2		2	1	2
CO4	अपने भावों को समुचित प्रकार से अभिव्यक्त कर सकेंगे।	3	1	1		3	2	2
CO5	गद्य एवं पद्य को उचित आरोह-अवरोह एवं लय के साथ वाचन कर सकेंगे	3	1	1		3	2	2
Co6	गद्य एवं पद्य को व्याकरण नियमों के अनुसार लिख सकेंगे।	2	2	2	2	2	1	3
CO7	गद्य एवं पद्य को मौन वाचन कर सकेंगे।	2	2	1	1	1	2	3
CO8	गद्य, पद्य एवं व्याकरण की पाठ-योजना का निर्माण कर सकेंगे।	2	1	2	2	2	1	2
CO9	गद्य, पद्य एवं व्याकरण की पाठ-योजना का मूल्यांकन कर सकेंगे।	2	2	2	1	2	2	3

3 Strong contribution, 2 Average contribution, 1 Low contribution

12. Brief description of self learning / E-learning component
<ol style="list-style-type: none"> चतुर्वेदी, शिखा, हिन्दी शिक्षण : आर लाल बुक डिपो, मेरठ सिंह, सावित्री, हिन्दी शिक्षण : इंटरनेशनल पब्लिशिंग हाउस, मेरठ

13. Books recommended:
<ol style="list-style-type: none"> लाल, रमन बिहारी, हिन्दी शिक्षण : रस्तोगी पब्लिकेशन्स, मेरठ चतुर्वेदी, शिखा, हिन्दी शिक्षण : आर लाल बुक डिपो, मेरठ सिंह, सावित्री, हिन्दी शिक्षण : इंटरनेशनल पब्लिशिंग हाउस, मेरठ गुसा, ममता, हिन्दी शिक्षण : एच.पी. भार्गव बुक हाउस, आगरा सिंह, कर्ण, हिन्दी शिक्षण : गोविन्द प्रकाशन, लखीमपुर खीरी

1. Name of the Department: Education										
2. Course Name	METHODS OF TEACHING URDU			L	T	P				
3. Course Code	ED 411			3	1	0				
4. Type of Course (use tick mark)				Core (v)	DE ()	FC ()				
5. Pre-requisite (if any)	Graduation	6. Frequency (use tick marks)	Even (v)	Odd ()	Either Sem ()	Every Sem ()				
7. Total Number of Lectures, Tutorials, Practicals										
Lectures = 30			Tutorials = 10		Practical = Nil					
8. COURSE OBJECTIVES: The purpose of this undergraduate course is to impart basic and key knowledge of Educational technological techniques. By using the principal of learning and teaching students may enable themselves a better teacher. After successfully completion of course, the student will able explore subject into their respective dimensions.										
9. COURSE OUTCOMES (CO): <i>After the successful course completion, learners will develop following attributes:</i>										
COURSE OUTCOME (CO)		ATTRIBUTES								
CO1		To acquaint the students with meaning, concept and nature of Urdu Language.								
CO2		To make the students know the function of Urdu Language.								
CO3		To make the students able to understand the importance of Urdu Language in secondary school curriculum.								
CO4		To enable the students to know the aims and objectives of teaching Urdu language at secondary level.								
CO5		To enable the students to be aware about various methods of teaching Urdu language. make the students able to understand the characteristics a good text-book in Urdu. make the students able to explore the various techniques of evaluation.								
10. Unit wise detailed content										
Unit-1	Number of lectures = 08		Title of the unit: Gaseous States							
The nature of Urdu Language and its scope.Functions and purpose of Language. Place of mother tongue in School Curriculum. The role of mother tongue in the education of child. Aims of teaching mother tongue at different levels---Primary, Lower,										
Unit-2	Number of lectures =08		Title of the unit: Colloidal State							
.Methods of Teaching: Teaching of Prose (Story, Drama) Teaching of Grammar Teaching of Poetry (Poems, Ghazals) (b) Mechanics of Reading: Silent reading Reading aloud Supplementary reading										
Unit-3	Number of lectures = 08		Title of the unit: Thermodynamics- I							
LESSON PLANNING AND TEXT BOOKS:- Lesson Planning: Meaning, Format, why and how. Format: Prose, Poetry and Drama, Grammar										
Unit-4	Number of lectures = 08		Title of the unit: Thermochemistry							
Teaching aids in Urdu-need, importance and types. Importance and need of curricular activity: Principles of selection of text books.										
Unit-5	Number of lectures = 08		Title of the unit: Phase Equilibrium							
EVALUATION IN URDU:Meaning and purpose of evaluation, Formative and Summative evaluation, Characteristics of good achievement test, Construction of achievement test in Urdu.										
11. CO-PO mapping										
COs	Attributes			PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	To acquaint the students with meaning, concept and nature of Urdu Language.			2	1	1		2	1	
CO2	To make the students know the function of Urdu Language			2	1	2		2	1	
CO3	To make the students able to understand the importance of Urdu Language in secondary school curriculum			2	1	2		2	1	
CO4	To enable the students to know the aims and objectives of teaching Urdu language at secondary level.			2	1	1		2	2	
CO5	To enable the students to be aware about various methods of teaching Urdu language. make the students able to understand the characteristics a good text-book in Urdu. make the students able to explore the various techniques of evaluation.			2	1	1		2	2	
3 Strong contribution, 2 Average contribution , 1 Low contribution										
12. Brief description of self learning / E-learning component										
Nil										

13. Books recommended:

Ansari, Akhtar Ghazal Aur Ghazal, Taragi-e-Urdu-Board,ki Taleem New Delhi, 1979.
Ansari, Akhtar, Ghazal aur Dares-Ghazal, Anjuman Tarikhi-e- Urdu,Aligarh
Ansari, Akhtar, Studies in Language and Language Teaching, Friends Aligarh, 1962
Ahmad Hasan Tadrees on Urdu, Marathzara Collage of Education, Aurangabad, 1973.
Saiyadin, K.G.Zindagi, Zaban aur Taleem, Anjuman Tariq-e- Urdu, Aligarh, 1971
Moinduddin Urdu Zaban ki Tadrees, Tarikhi-Urdu Bureau, New Delhi, 1983
Gurrey, P. Teaching the Mother Tongue in Secondary Schools, Longmans London 1958.

1.NameoftheDepartment: Education								
2.CourseName	METHODS OF TEACHING HISTORY		L	T	P			
3.CourseCode	ED413		3	1	0			
4.TypeofCourse(use tickmark)			Core(√)	DE()	FC()			
5.Pre-requisite(ifany)	Graduation	6.Frequency(usetickmarks)	Even()	Odd(√)	EitherSem() EverySem()			
7.TotalNumberofLectures,Tutorials,Practicals								
Lectures=30		Tutorials=10		Practical=Nil				
8. COURSEOBJECTIVES: Thepurposeofthisundergraduatecourseisto equip students with strong foundation of knowledge and skills in the fields of Teaching History. Byusingtheprincipal of teaching History Byusingtheprincipaloflearningand teaching students may enable themselves a better teacher. .Aftersuccessfullycompletionofcourse,thestudentwillableexploresubjectinto theirrespective dimensions..								
9.COURSEOUTCOMES (CO): <i>Afterthesuccessfulcoursecompletion,learnerswilldevelopfollowingattributes:</i>								
COURSEOUTCOME(CO)		ATTRIBUTES						
CO1	To acquaint the students with the concept and importance of History in secondary school curriculum							
CO2	To make the students know about aims and objectives of teaching History							
CO3	To enable the students apply appropriate method and techniques for teaching of History at secondary level.							
CO4	To acquaint the students with significance of lesson planning in History							
CO5	To acquaint the students with significance of about unit planning and syllabus planning.							
10.Unitwisedetailedcontent								
Unit-1	Number of lectures=8	Title of the unit: MEANING, NATURE AND SIGNIFICANCE OF HISTORY:						
Meaning, nature and scope of History, Modern concept of teaching History, Relation of History with other school subjects, Importance of teaching history at secondary school curriculum, Role of history teacher for use and development of History.								
Unit-2	Number of lectures=8	Title of the unit: AIMS AND OBJECTIVES OFTEACHING HISTORY						
Differentiate between aims and objectives, Objectives: types, Aims and objectives of teaching history at secondary school level, Supplementary reading material.								
Unit-3	Number of lectures=8	Title of the unit: METHOD OF TEACHING HISTORY:						
Unit-4	Number of lectures=8	Title of the unit: LESSON PLANING:						
Meaning and significance, Characteristics of good lesson plan, Steps of lesson plan in History								
Unit-5	Number of lectures=8	Title of the unit: SYLLABUS PLANNING & UNIT PLAN:						
Syllabus: concept and factors considered when plan a syllabus, Unit Plan in History.								
11.CO-POmapping								
COs	Attributes	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	To acquaint the students with the concept and importance of History in secondary school curriculum	1	2	2	2	1	2	2
CO2	To make the students know about aims and objectives of teaching History	2	2	1	2	2	2	2
CO3	To enable the students apply appropriate method and techniques for teaching of History at secondary level	2	2	2	2	2	2	2
CO4	To acquaint the students with significance of lesson planning in History.	2	2	2	2	2	2	2
CO5	To acquaint the students with significance of about unit planning and syllabus	2	2	2	2	2	2	2
3Strongcontribution,2Averagecontribution,1Lowcontribution								
12.Briefdescriptionofselflearning/E-learningcomponent								
13.Booksrecommended:								
Chaudhary, K.P. (1975),The Effective Teaching of History in India. New Delhi NCERT								
Aggarwal, J.C. (2003), Teaching of Social Studies: A Practical Approach, Vikas Publishing House, Pvt. Ltd. New Delhi								
Ghate, V.D. (1956),Teaching of History (English & Hindi) Bombay, Oxford University, Press.								

1.NameoftheDepartment:Education										
2.CourseName		METHODS OF TEACHING ECONOMICS		L	T	P				
3.CourseCode		ED 416		3	1	0				
4.TypeofCourse(use tickmark)				Core(v)	DE()	FC()				
5.Pre-requisite(ifany)		Graduation with any Discipline	6.Frequency(usetickmarks)	Even(v)	Odd()	EitherSem()				
						EverySem()				
7.TotalNumberofLectures,Tutorials,Practical										
Lectures=03			Tutorials=1		Practical=Nil					
8. COURSEOBJECTIVES-										
<ul style="list-style-type: none"> • know aims and objectives of teaching Economics at School level • understand the basic subject matter of the economics • Understand the meaning and concept of lesson planning • Understand the resources required for classroom transactions • Select appropriate Instructional Media for teaching commerce at higher secondary stage • Apply different Evaluation techniques in Economics 										
9.COURSEOUTCOMES (CO):										
<i>Afterthesuccessfulcoursecompletion,learnerswilldevelopfollowingattributes:</i>										
COURSEOUTCOME(CO)		ATTRIBUTES								
CO1		Students will be able to define Meaning, Nature, Scope and Importance of Economics.itsr elation with other Discipline.								
CO2		Students will be able to explain various theories in Economics								
CO3		Students will be able to understand Need and Importance of Economics Room Co-curricular Activities and prepare lesson plans in Economics								
CO4		Students will be able to understand the different types of Instructional Media								
CO5		Students will be able to understand Meaning and Purpose of Evaluation and its types.								
10.Unitwisedetailedcontent										
Unit-1		Numberoflectures=02		Titleoftheunit: Aims, Objectives and Nature of Economics as a Discipline						
Meaning, Nature, Scope and Importance of Economics. Relation of Economics with other Discipline. Aims and Objectives of Economics teaching at secondary and Senior secondary stage.										
Unit-2		Numberoflectures=02		Titleoftheunit: Subject Matter in Discipline						
Theories of Demand and Supply, Consumer Behaviour, Theory of Production, Cost Theories Types of Market Structures, Cost and Revenue curves under PCM and Monopoly Theory of Income and Employment, National Income, Budget. Latest Trends in National and International Economics										
Unit-3		Numberoflectures=02		Titleoftheunit: Lesson Planning and Resources supplementing Teaching-Learning						
Meaning Need and Preparation of Lesson Plan in Economics Need and Importance of Economics Room Co-curricular Activities : Types, Role and Significance of Co-curricular Activities in teaching Economics										
Unit-4		Numberoflectures=02		Titleoftheunit: Instructional Media						
Instructional Media : Concept, Importance and types of instructional Media and their use in teaching of Economics										
Unit-5		Numberoflectures=02		Titleoftheunit: Evaluation in Economics						
Meaning and Purpose of Evaluation, Formative and Summative Evaluation types of Test : Essay type Test and Objective Type Test-Characteristics, Merits and Demerits										
11.CO-POmapping										
COs	Attributes			PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	Students will be able to define Meaning, Nature, Scope and Importance of Economics.itsr elation with other Discipline.			2	1	1	2	2	-	-
CO2	Students will be able to explain various theories in Economics			1	1	1	2	2	-	-
CO3	Students will be able to understand Need and Importance of Economics Room Co-curricular Activities and prepare lesson plans in Economics			2	2	2	2	2	-	-
CO4	Students will be able to understand the different types of Instructional Media			2	2	1	1	2	-	-
CO5	Students will be able to understand Meaning and Purpose of Evaluation and its types.			2	2	2	1	2	-	-
3Strongcontribution,2Averagecontribution,1Lowcontribution										
12.Briefdescriptionofself-learning/E-learningcomponent										

13. Books recommended:

1. Tyagi, Gurusarandas: Economics Teaching, Vinod Pustak Mandir, Agra-5
2. Arora, P.N (1985) Evaluation in Economics, New Delhi, NCERT.
3. Bawa, MS (1995): Evaluation in Economics IASE, Delhi University, New Delhi
4. Kanwar. B.S. (1973) Teaching of Economics, Prakash Brothers., Ludhiana
5. Siddiqui M.H. (1993) Teaching of Economics, Ashish Publishing House, New Delhi.

1.NameoftheDepartment:Education											
2.CourseName		METHODS OF TEACHING COMMERCE			L	T	P				
3.CourseCode		ED 417			3	1	0				
4.TypeofCourse(use tickmark)					Core(v)	DE()	FC()				
5.Pre-requisite(ifany)		Graduation with any Discipline		6.Frequency(usetickmarks)	Even(v)	Odd()	EitherSem()	EverySem()			
7.TotalNumberofLectures,Tutorials,Practical											
Lectures=3				Tutorials=1		Practical=Nil					
<ul style="list-style-type: none"> ● 8. COURSEOBJECTIVES ● To know aims and objectives of teaching commerce at higher secondary level ● To understand the basic subject matter in Commerce Discipline ● To understand the meaning and concept of lesson planning ● To understand the resources required for classroom transactions ● To Select appropriate Instructional Media for teaching commerce at higher secondary stage ● Apply different Evaluation techniques in Commerce 											
9.COURSEOUTCOMES (CO):											
<i>Afterthesuccessfulcoursecompletion,learnerswilldevelopfollowingattributes:</i>											
COURSEOUTCOME(CO)		ATTRIBUTES									
CO1		Students will be able to understand Meaning, Nature, Scope and Importance of commerce as a Discipline and its relation with other disciplines									
CO2		Students will be able to understand different subject matters of commerce such as Trade,Management , Banking etc.									
CO3		Students will be able to understand Need and Importance of Commerce Room Co-curricular Activities and prepare lesson plans in Economics									
CO4		Students will be able to understand the different types of Instructional Media									
CO5		Students will be able to understand Meaning and Purpose of Evaluation and its types.									
10.Unitwisedetailedcontent											
Unit-1		Numberoflectures=02		Titleoftheunit: Aims, Objectives and Nature of Commerce as a Discipline							
Meaning, Nature, Scope and Importance of commerce as a Discipline and its relation with other disciplines, Historical Perspective with development of Commerce as Subject and Discipline.Aims and Objectives of Commerce teaching at higher secondary stage.											
Unit-2		Numberoflectures=02		Titleoftheunit: . Subject Matter in Discipline							
Trade : Meaning, Concept, importance and Functions Business Organization : Concept, Importance and Types Concepts of Accountancy : Book-Keeping, Journal, Subsidiary Books, Final Accounts, Bill of Exchange, Partnership, Shares and Company Final Accounts Management : Concept, Principles Functions (POSDCoRB) Banking : Meaning, Types and functions. Concept and Process of E-Commerce											
Unit-3		Numberoflectures=02		Titleoftheunit: Lesson Planning and Resources supplementing Teaching-Learning							
Meaning, Need and Preparation of Lesson Plan in Commerce ,Need and Importance of Commerce Room Co-curricular Activities : Types , Role and Significance of Co-curricular Activities in teaching Economic											
Unit-4		Numberoflectures=02		Titleoftheunit: Instructional Media							
Instructional Media : Concept, Importance and types of instructional Media and their use in teaching of Economics											
Unit-5		Numberoflectures=02		Titleoftheunit: Evaluation in Commerce							
Meaning and Purpose of Evaluation, Formative and Summative Evaluation,Construction of an Achievement Test in Commerce, Characteristics of Good Achievement Test											
11.CO-POmapping											
COs	Attributes				PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	Students will be able to understand Meaning, Nature, Scope and Importance of commerce as a Discipline and its relation with other disciplines				2	2	2	2	2	-	-
CO2	Students will be able to understand different subject matters of commerce such as Trade,Management , Banking etc.				2	1	1	2	2	-	-
CO3	Students will be able to understand Need and Importance of Commerce Room Co-curricular Activities and prepare lesson plans in Economics				1	2	1	2	2	-	-
CO4	Students will be able to understand the different types of Instructional Media				2	2	1	1	2	-	-
CO5	Students will be able to understand Meaning and Purpose of Evaluation and its types.				2	2	2	1	2	-	-
3Strongcontribution,2Averagecontribution,1Lowcontribution											
12.Briefdescriptionofself-learning/E-learningcomponent											

13. Books recommended:

1. Agrawal, A .N. Business methods and machinery, kitab mahal, Allahabad, 1981
2. Bhusham, Y. K. Fundamental of business organization and management, sultan Chand & sons, Darya Ganj, New Delhi-1991
3. Haradway, M. Testing and Evaluation in business education ,Cincinnati, south western publishing co, 1966.
4. Kapoor,N.D. Principles and practice of accountancy, Pitamber publishing co., New Delhi, 1990.
5. Khan M,S. commerce Education ,sterling publishers, pvt. Ltd. New Delhi, 1982.

1.NameoftheDepartment: Education											
2.CourseName		METHODS OF TEACHING SOCIAL STUDIES			L		T		P		
3.CourseCode		ED418			3		1		0		
4.TypeofCourse(use tickmark)					Core(√)		DE()		FC()		
5.Pre-requisite(ifany)		Graduation	6.Frequency(usetickmarks)		Even()	Odd(√)		EitherSem()	EverySem()		
7.TotalNumberofLectures,Tutorials,Practicals											
Lectures=30				Tutorials=10			Practical=Nil				
8. COURSEOBJECTIVES: Thepurposeofthisundergraduatecourseisto equip students with strong foundation of knowledge and skills in the fields of Teaching History. Byusingthepincipal of teaching History Byusingthepincipaloflearningand teaching students may enable themselves a better teacher. Aftersuccessfullycompletionofcourse,thestudentwillableexploresubjectinto theirrespective dimensions..											
9.COURSEOUTCOMES (CO): <i>Afterthesuccessfulcoursecompletion,learnerswilldevelopfollowingattributes:</i>											
COURSEOUTCOME(CO)		ATTRIBUTES									
CO1		To acquaint the students with the concept and importance of Social Studies in secondary school									
CO2		To make the students know about aims and objectives of teaching Social Studies.									
CO3		To acquaint the students with significance of lesson planning in Social Studies.									
CO4		To develop among students competencies in teaching of Social Studies at secondary level.									
CO5		To enable the students to prepare a year plan and unit plan.									
10.Unitwisedetailedcontent											
Unit-1		Number of lectures=8			Title of the unit: MEANING, NATURE AND SIGNIFICANCE OF HISTORY:						
Concept of Social Studies, differentiate between Social Studies and Social Science The need for teaching different subjects in Social Studies. Present perception about Social Studies, Importance of teaching Social Studies at secondary school curriculum. Principle of designing Social Studies curriculum.											
Unit-2		Number of lectures=8			Title of the unit: AIMS AND OBJECTIVES OFTEACHING HISTORY						
Differentiate between aims and objectives.Aims and objectives of teaching social studies at Secondary School Stage. Teaching aids- Meaning, Need and types											
Unit-3		Number of lectures=8			Title of the unit: METHOD OF TEACHING HISTORY:						
Unit-4		Number of lectures=8			Title of the unit: LESSON PLANING:						
Methods: concepts and meaning. Assignment Method Team Teaching Method Supplementary reading material											
Unit-5		Number of lectures=8			Title of the unit: SYLLABUS PLANNIG & UNIT PLAN:						
Meaning and importance of lesson planning. Characteristics of good lesson plan Steps of lesson planning Various approaches to lesson planning Year plan: meaning and concept. Unit Plan: meaning, make a blue print.											
11.CO-POmapping											
COs		Attributes			PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1		To acquaint the students with the concept and importance of Social Studies in secondary school			1	2	2	2	1	2	2
CO2		To make the students know about aims and objectives of teaching Social Studies			2	2	1	2	2	2	2
CO3		To acquaint the students with significance of lesson planning in Social Studies.			2	2	2	2	2	2	2
CO4		To develop among students competencies in teaching of Social Studies at secondary level.			2	2	2	2	2	2	2
CO5		To enable the students to prepare a year plan and unit plan.			2	2	2	2	2	2	2
3Strongcontribution,2Averagecontribution,1Lowcontribution											
12.Briefdescriptionofselflearning/E-learningcomponent											
13.Booksrecommended: Chaudhary, K.P. (1975),The Effective Teaching of History in India. New Delhi NCERT Aggarwal, J.C. (2003), Teaching of Social Studies: A Practical Approach, Vikas Publishing House, Pvt. Ltd. New Delhi Ghate, V.D. (1956),Teaching of History (English & Hindi) Bombay, Oxford University, Press.											

1.Name of the Department: Education								
2.CourseName	Methodology of Teaching of Mathematics			L	T	P		
3.CourseCode	ED419			3	1	0		
4.TypeofCourse(use tickmark)				Core(√)	DE()	FC()		
5.Pre-requisite(ifany)	Graduation in any Discipline	6.Frequency(usetick marks)	Even(√)	Odd()	EitherSem()	EverySem()		
7.TotalNumberofLectures,Tutorials,Practicals								
Lectures=36			Tutorials=10		Practical=Nil			
8. COURSEOBJECTIVES: ThepurposeofthispostgraduatecourseistoimparttheoreticalandpracticalknowledgeofEducational Research.Bystudyingthedifferent types of educational research and process, students will be able to do research in different areas,Application of statistical techniques for data analysis and draw conclusions.								
9.COURSEOUTCOMES (CO): <i>Afterthesuccessfulcoursecompletion,learnerswilldevelopfollowingattributes:</i>								
COURSEOUTCOME(CO)		ATTRIBUTES						
CO1		Understand the Meaning, Concept, aims and objectives of teaching Mathematics at Secondary stage						
CO2		Know the different types of Correlation of Mathematics with other subjects						
CO3		Acquaint students about Lesson and Unit planning in Mathematics						
CO4		Methods and Techniques for teaching Mathematics at school level						
CO5		Understand the Measurement and Evaluation in Mathematics						
10.Unitwisedetailedcontent								
Unit-1	Numberoflectures=12	Title of the unit: Concept and Objectives of Teaching Mathematics						
Meaning, Concept and Definitions of Mathematics, Purpose of teaching Mathematics in Present Scenario, Nature and Values of Teaching Mathematics, Aims and Objectives of Teaching Mathematics at school level, Correlations of Mathematics with other school subjects								
Unit-2	Numberoflectures=8	Title of the unit: Unit Planning In Mathematics						
Meaning and Definitions of Unit Planning, Need and Importance of Unit Planning for a teacher, Steps for preparation in Unit Planning, Sample Unit plan for teaching of Arithmetic, Algebra, Geometry and Trigonometry								
Unit-3	Numberoflectures=8	Title of the unit: Lesson Planning In Mathematics						
Meaning and Definitions of Lesson Planning, Need and Importance of Lesson Planning for a teacher, Steps for preparation in Lesson Planning, Sample lesson plan for teaching of Arithmetic, Algebra, Geometry and Trigonometry								
Unit-4	Numberoflectures=10	Title of the unit: Methods and Techniques of Teaching Mathematics						
Various approaches of Teaching Mathematics, Meaning and Definitions of Methods, Strategies and Tactics of Teaching mathematics, Meaning, definitions and Merits and Demerits of Analysis-Synthesis. Induction Deduction .								
Unit-5	Numberoflectures=8	Title of the unit: Measurement and Evaluation In Mathematics						
Meaning and Definitions of Measurement and Evaluation in Mathematics, Techniques of Teaching, Mathematics: Oral, Written and Drill-work, Home Assignment, Self-study, Characteristics of a Good Measuring Tool: General Criteria and technical Criteria								
11.CO-POmapping								
COs	Attributes	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	Understand the Meaning, Concept, aims and objectives of teaching Mathematics at Secondary stage	3	2	1	2	2	1	2
CO2	Know the different types of Correlation of Mathematics with other subjects	3	2	1	2	2	1	1
CO3	Acquaint students about Lesson and Unit planning in Mathematics	3	3	1	2	2	1	1
CO4	Methods and Techniques for teaching Mathematics at school level	2	3	1	2	2	1	1
CO5	Understand the Measurement and Evaluation in Mathematics	3	2	1	2	2	1	1
3Strongcontribution,2Averagecontribution,1Lowcontribution								
12.Briefdescriptionofselflearning/E-learningcomponent								
13.Booksrecommended:								
1. Kulshreshtha, A.K. (2006). "Teaching of Mathematics" R.Lall Book Depot,Meerut								
2. Bhatnagar, A.B. (2010). "Teaching of Mathematics" R.Lall Book Depot,Meerut								
3. Arora, S.K. (1998). "How to teach Mathematics" Shanti Publishers, Bhiwani								
4. Thomas, A. S. (1993). Mathematics for Elementary Teachers (An Interactive Approach),Florida: HBJ Publishers								
5. Rawat, M.S. "Teaching of Mathematics" Vinod Pustak Mandir, Agra								
6. Siddhu, K.S. "Teaching of Mathematics" Sterling Publication, New Delhi								

7. Kapur, J.N. (1991). Suggested Experiments in School Mathematics. New Delhi: Arya Book Depot
8. Jain, S. L. (1973). Ganit Shikshan. Jaipur: Hindi Granth Academy
9. Kapoor, J. N. (1988). Vidyalaya Ganik ke Liye San Prayog. New Delhi: Arya Book Depot
10. Shankaran & Gupta, H. N. (1984). Content-cum-Methodology of Teaching Mathematics. New Delhi: NCERT.

13. Books recommended:

1. Bansal Suraksha & Maheswari Sudha, (2010), Teaching of Home Science, Meerut, International Publishing House.
2. Sheri G.P & Saran D.P (2008) Teaching of Home Science ,New Delhi: Vinod Pustak Mandir
3. 3. Yadav Seema (2001) Teaching of Home Science, New Delhi: Anmol Publication.
5. 4. Sahni Madhu , (1998) ,Indian Home Science, Varanasi: Hindi Prakashak Publications.
6. 5. Moorthy Gayatri, (1998), Home Management, New Delhi, Arya Publishing House.

SEMESTER-II

1. Name of the Department: Education								
2. Course Name	METHODS OF TEACHING PHYSICAL SCIENCE			L	T	P		
3. Course Code	ED421			3	1	0		
4. Type of Course (use tick mark)				Core	DE (v)	FC ()		
5. Pre-requisite (if any)	GRADUATION	6. Frequency (use Tick marks)	Even ((v))	Odd	Either Sem ()	Every Sem ()		
7. Total Number of Lectures, Tutorials, Practicals								
Lectures = 30		Tutorials = 10		Practical = Nil				
8. COURSE OBJECTIVES: The course is aimed to prepare the students with the knowledge and skill of teaching physical sciences								
9. COURSE OUTCOMES (CO): <i>After the successful course completion, learners will develop following attributes:</i>								
COURSE OUTCOME (CO)	ATTRIBUTES							
CO1	Enumerate characteristics, aims of teaching science and role of science teacher							
CO2	Identify different approaches used in teaching physical science							
CO3	Explain the pedagogical shift and principles of curriculum							
CO4	Plan the teaching of physical science and prepare the teaching aids							
CO5	Identify the need laboratory as learning resource in teaching physical science							
10. Unit wise detailed content								
Unit-1	Number of lectures	08						
MEANING OF SCIENCE AND SCIENCE TEACHER: Meaning and nature of science, Aims and objectives of learning physical science, Utility of physical science in school curriculum, Role of science teacher in developing scientific attitude and scientific temper								
Unit-2	Number of lectures	08						
APPROACHES IN TEACHING PHYSICAL SCIENCE: Approaches and strategies of learning science, Constructivist approach, Collaborative learning approach, Problem solving approach, Inquiry approach								
Unit-3	Number of lectures	08						
PEDAGOGY IN PHYSICAL SCIENCE Pedagogical shift-planning teaching learning experiences Principles of curriculum in physical science, Planning evaluation in physical science								
Unit-4	Number of lectures	08						
PLANNING IN TEACHING PHYSICAL SCIENCE Unit planning and lesson planning, Need , importance and preparation, Preparation of sample plan, Teaching aids in physical science								
Unit-5	Number of lectures	08						
PRACTICAL ASPECT IN PHYSICAL SCIENCE Laboratory as learning resource: need and features Demonstration and concept of, Measurement, Simple circuits, Refraction, Organic and inorganic compounds, Identification of gases								
11. CO-PO mapping								
COs	Attributes	P O 1	P O 2	P O 3	P O 4	P O 5	P O 6	P O 7
CO1	Enumerate characteristics, aims of teaching science and role of science teacher	1	2	2	1	1	1	3
CO2	Identify different approaches used in teaching physical science	2	3	2	1	3	1	1
CO3	Explain the pedagogical shift and principles of curriculum	1	3	3	1	1	2	1
CO4	Plan the teaching of physical science and prepare the teaching aids	1	3	3	1	2	1	3
CO5	Identify the need laboratory as learning resource in teaching physical science	1	3	1	1	1	1	1
3 Strong contribution, 2 Average contribution , 1 Low contribution								
12. Brief description of self-learning / E-learning component								
13. Books recommended: CO1, CO2,CO3, CO4, CO5								
1. Das, R.C. curriculum and evaluation, NCERT								
2. Kulshreshtha, S.P. Teaching of Science, Merrut								
3. Dayal, Deepak, Modern methods of teaching Physics, New Delhi								
4. Kalra, R.M. & Gupta, Vandana, Teaching of science, MVC, Delhi								

1. Name of the Department: Education							
2. Course Name	METHODS OF TEACHING BIOLOGICAL SCIENCE			L	T	P	
3. Course Code	ED 422			3	1	0	
4. Type of Course (use tick mark)				Core (√)	DE ()	FC ()	
5. Pre-requisite (if any)	Graduation with any Discipline	6. Frequency (use tick marks)	Even (√)	Odd ()	Either Sem ()	Every Sem ()	
7. Total Number of Lectures, Tutorials, Practical							
Lectures = 20			Tutorials = 10		Practical = Nil		

8. COURSE OBJECTIVES-							
<ul style="list-style-type: none"> Develop awareness about development in the area of teaching and learning of Biological science Develop skill and competencies in the pupil teacher related to Biological Science at Secondary level. Use various methods and approaches of Biological Science. Develop an understanding of modern technique & approaches for teaching Biological Science. Prepare Unit plan, Lesson Plan in Biological Science. Acquire necessary skills & training for school-based activities such as Science Clubs, Science Fairs, organization of lab etc. 							

9. COURSE OUTCOMES (CO):
After the successful course completion, learners will develop following attributes:

COURSE OUTCOME (CO)	ATTRIBUTES
CO1	Students will be able to understand aims and objectives of Biological Science
CO2	Students will be able to define Teaching Aids
CO3	Students will be able to understand different types of methods.
CO4	Students will be able to define Evaluation
CO5	Students will be able to understand practical aspects of Biological Science

10. Unit wise detailed content

Unit-1	Number of lectures = 04	Title of the unit: AIMS AND OBJECTIVES OF TEACHING BIOLOGICAL SCIENCE
<ul style="list-style-type: none"> Aims and objectives of teaching Biological Science at Secondary School level Need and Importance of teaching Biological Science at Secondary School level. 		
Unit-2	Number of lectures =04	Title of the unit: AUDIO VISUAL AIDS & LESSON PLANNING
<ul style="list-style-type: none"> Unit Planning - – Meaning, need, importance and preparation. Lesson planning – Meaning, need, importance and preparation. Different types of teaching aids – Audio, Visual and Audio – visual aids in biological science. 		
Unit-3	Number of lectures = 04	Title of the unit: METHODS OF TEACHING BIOLOGICAL SCIENCE
<ul style="list-style-type: none"> Lecture & Lecture Cum- Demonstration Method: Merits and Demerits. Laboratory method: Merits and Demerits. Heuristic Method – Meaning and use of Heuristic method in biological science. Merits and Demerits of Heuristic method. Project method: Meaning and Definition of a project. Steps of Project Method, Merits and demerits of Project Method. 		
Unit-4	Number of lectures = 04	Title of the unit: EVALUATION & CO-CURRICULAR ACTIVITIES
<ul style="list-style-type: none"> Concept and meaning of Evaluation. Types of test : - Essay type test& Objective type test - Characteristics Merits and Demerits Co-curricular activities in Biological Science- Field trips, Excursion, Science Club and Science Museum. 		
Unit-5	Number of lectures = 04	Title of the unit: PRACTICAL ASPECTS OF BIOLOGICAL SCIENCE

Animal Kingdom
 A Study of Microscope, General survey of Animal Kingdom's Specimen any eight.
Plant Physiology:
 Demonstrate and understand the phenomenon of osmosis by potato osmoscope.
 Demonstrate and understand the phenomenon of plasmolysis by cells of beet root.

11. CO-PO mapping									
COs	Attributes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	
CO1	Students will be able to understand aims and objectives of Biological Science	3	2	2	2	2	1	1	
	Students will be able to define Teaching Aids	2	2	2	1	1	2	2	

CO2								
CO3	Students will be able to understand different types of methods.	2	3	3	2	1	2	2
CO4	Students will be able to define Evaluation	2	2	2	1	1	2	2
CO5	Students will be able to understand practical aspects of Biological Science	3	2	2	2	1	2	2

3 Strong contribution, 2 Average contribution , 1 Low contribution

12. Brief description of self-learning / E-learning component

13. Books recommended:

1. Kulshrestha S. P. , (2006), Teaching of Biology, Meerut, R. Lal book Depot.
2. BhaskaraRao, D (2000): Teaching of Biology, Nagarjuna Publishers, Gunter
3. Kumar Bandre, (2007), A text book of Practical Botony, Meerut, Rastogi Publications.
4. Mangal S.K (2005): Teaching of Life Sciences, New Delhi, Arya Book Depot.
5. Gupta V.K (1994): Life Sciences Education Today, Arun Publishing House.