

Department of Mathematics				Dibrugarh University			
Title of the Course		Mathematics Teaching			Paper Number		4C4
Category	Core	Year	2	Credits	4	Course Code	MTH C13
		Semester	4				
Instructional Hours (Per week)		Lecture		Tutorial		Lab Practical	
		3		2		5	
Objectives of the Course		<p>On completion of the course, the students will be able to</p> <ol style="list-style-type: none"> Describe the nature of mathematics and also arithmetic, algebra, geometry and statistics. Define and describe mathematical concepts, generalization and different types of proofs. Appreciate the development of Mathematical understanding in the human civilization State the aims and objectives of mathematics teaching in light of the NEP 2020. Discuss and compare methods of Mathematics teaching. Use different techniques of assessment & evaluation. 					
Course Outline		<p>Unit 1 : Mathematical Concepts Marks 15 Nature of Mathematics, arithmetic, algebra, geometry, and statistics; mathematical propositions, axioms and symbolism; Mathematical concepts and proofs, Historical developments of Mathematical understandings till 21st century.</p> <p>Unit 2 : Aims and Objectives of teaching Mathematics Marks 15 Educational values of Mathematics; Aims and objectives of teaching Mathematics at different levels; Objectives of teaching Arithmetic, Algebra, Geometry and Statistics; Bloom's Taxonomy of Educational Objectives; Revision of Bloom's Taxonomy.</p> <p>Unit 3 : Methods and Techniques of Teaching Mathematics Marks 15 Methods: Inductive – Deductive , Analytic – Synthetic, Problem Solving, Heuristic, Laboratory, Project, Flip classroom. Techniques: Oral, Online and Hybrid Techniques, Assignment, Supervised study, Programmed Learning.</p> <p>Unit 4 : Assessment and Evaluation Marks 15 Meaning of assessment and evaluation and their interrelationship, devices and techniques of assessment, planning, construction and implementation of assessment in Mathematics, Online assessments, Issues in Assessment and evaluation.</p>					
Recommended Text		<ol style="list-style-type: none"> Baur Gregory R and Linder Olson George: <i>Helping children Learn Mathematics</i>. Cummings publishing Co. INC, London. NCERT, <i>A Textbook of Content-cum-Methodology of Teaching Mathematics</i>, New Delhi: NCERT. Ebel, R.L.: <i>Measuring Educational Achievement</i> ; Prentice Hall of India Pvt. Ltd, New Delhi. 					
Reference Books		<ol style="list-style-type: none"> Sidhu, K.S.: <i>The Teaching of Mathematics; Sterling Publishers Pvt. Ltd.</i> New Delhi-16 					
Website and E-learning Source		<ul style="list-style-type: none"> https://www.nctm.org/publications/mathematics-teacher/ https://academic.oup.com/teamat 					