Semester	AUG 2022
Open to semester	5,7,11
Course code	**MT3124**
Course title	**Real Analysis II**
Credits	4 /
Course Coordinator & participating faculty (if any)	Ayan Mahalanobis
Nature of Course	Lectures
Pre-requisites	Real analysis I We will rely on various notions in real analysis like limits, continuity and differentiable functions.
Objectives (goals, type of students for whom useful, outcome etc)	There are two objectives to this course. 1. Familiarize yourself with R^n. The n-dimensional space. This jump into higher dimension is necessary to go to the higher realms of Mathematics and Physics. 2. To prepare the base and then to prove the implicit function theorem and the inverse function theorem. In particular, the concept of local comes into play which is of interest not only in Mathematics but also in Physics.
Course contents (details of topics /sections with no. of lectures for each)	The topics are first few chapters of the text book. Functions of real variables by Martin Moskowitz and Fotios Paligogiannis, world scientific. It is not possible to mention number of content of each lecture beforehand. In many ways it depends on the class.
Evaluation /assessment	End-Sem Examination-30% Mid-Sem Examination-30% Others-40%
Suggested readings (with full list of authors, publisher, year, edn etc.)	Functions of real variables by Martin Moskowitz and Fotios Paligogiannis, World Scientific.