

Ambedkar University Delhi

Course Outline

Winter Semester (Jan-May 2018)

School:	Undergraduate Studies			
Programme with title:	BA (Honours)			
Semester to which offered: (II/ IV/ VI)	IV semester			
Course Title:	Analysis III			
Credits:	4 Credits			
Course Code (new):	SUS1MA508			
Course Code (old):	M12			
Type of Course:	Compulsory	yes	Cohort	BA (H) Mathematics
	Elective	yes	Cohort	BA (H) other than Mathematics

For SUS only (Mark an X for as many as appropriate):

1. Foundation (Compulsory)
2. Foundation (Elective)
3. Discipline (Compulsory) X
4. Discipline (Elective) X
5. Elective

Course Coordinator and Team: Mradul Veer Singh (CC), Kranti Kumar

Email of course coordinator: mradul@aud.ac.in

Pre-requisites: SUS1MA505

Aim: This course has been designed keeping in mind the students who have already been exposed to M08. A beginning to theory of integrable functions is made by introducing basics of Riemann Integration. A detailed study of sequences and series of functions along with lots of examples will be done. The various notions learnt till now will be used for functions of two variables.

Brief description of modules/ Main modules:

- 1. Riemann Integration**
- 2. Sequences and Series of functions**
- 3. Functions of two variables**

References:

1. Elementary Analysis: The Theory of Calculus by Kenneth A Ross, Springer (2010) ISBN: 1441928111.
2. Essential Calculus: Early Transcendental, by James Stewart, Thomson Brook/ Cole (2007), ISBN: 0-495-01428-1

ADDITIONAL REFERENCE:

1. Bartle and Sherbert, Introduction to Real Analysis (Third Edition), John Wiley and Sons (Asia) Pte. Ltd., Singapore, 2002.
2. Weir, Hass and Giordano, Thomas' Calculus (Eleventh Edition), Pearson, 2009

Tentative Assessment schedule with details of weightage:

S.No	Assessment	Date/period in which Assessment will take place	Weightage
1	Class test	Second/third week of February, 2018	10%
2	Mid Semester Exam	As per AUD Academic Calendar	25%
3	Tut/ Home Assignments	Throughout the semester	15%
4	Presentation/ Viva	First/Second week of April, 2018	15%
5	End Semester Exam	As per AUD Academic Calendar	35%