

Ambedkar University Delhi

Course Outline

Monsoon Semester (July-December 2018)

School:	Undergraduate Studies			
Programme with title:	BA (Honours)			
Semester to which offered: (I/ III/ V)	III semester			
Course Title:	Analysis II			
Credits:	4 Credits			
Course Code (new):	SUS1MA505			
Course Code (old):	M08			
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: Ramneek Khassa (CC)

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

Pre-requisites: M04

Aim: This course covers calculus more thoroughly and more theoretically, giving an introduction to important mathematical techniques and results that give a foundation for further work in analysis. It serves as an introduction to the rigorous proofs and formal mathematical arguments needed in all upper division math courses.

Brief description of modules/ Main modules:

1. **The real numbers**
2. **Sequences and series**
3. **Limit and continuity**
4. **Differentiation**

References:

1. Bartle and Sherbert, Introduction To Real Analysis (Third Edition), John Wiley and Sons (Asia) Pte. Ltd., Singapore, 2002.
2. K. N. Ross, Elementary Analysis: Review of Calculus, Springer, 2007.

Tentative Assessment schedule with details of weightage:

S.No	Assessment	Date/period in which Assessment will take place	Weightage
1	Class test	End August	10%
2	Mid Semester Exam	End September/ early October	25%
3	Tut/ Home Assignments	Throughout the semester	15%
4	Viva	End October/ early November	15%
5	End Semester Exam	As per AUD Academic Calendar	35%