Ambedkar University Delhi

Course Outline

Winter Semester (Jan-Jun 2018)

School: Undergraduate Studies

Programme with title: BA (Honours)

Semester to which offered: (II/IV/ VI)   IV semester

Course Title: Algebra II

Credits: 4 Credits

Course Code (new):   SUS1MA506

Course Code (old):   M07

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: Balchand Prajapati (CC), Geetha Venkatraman

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

Pre-requisites: M03

Aim: This course will continue from where the first Algebra course M03 finished. Further topics in Group Theory, Ring Theory and Vector Spaces will be investigated.

Brief description of modules/ Main modules:

1. **Group Theory**
2. **Ring Theory**
3. **Linear Algebra**

Reading List:

1. Bhattacharya, Jain and Nagpal, Basic Abstract Algebra (Second Edition), Cambridge, 2009.
2. Joseph A. Gallian, Contemporary Abstract Algebra (Fourth Edition), Narosa Publishing House, New Delhi, 1999.
3. Jimmie Gilbert and Linda Gilbert, Linear Algebra and Matrix Theory (Second Edition), Brooks Cole, 2004.
4. David C. Lay, Linear Algebra and its Applications (Third Edition), Pearson Education Asia, Indian Reprint, 2007.

Assessments:

Components	Weightage	Schedule
1. Class Test	10%	Second week of February
2. Mid Semester Test	25%	As per AUD timetable
3. Presentation/Viva	15%	First week of April
4. End Semester Test	35%	As per AUD timetable
5. Tutorial Assessment	15%	Throughout the semester