SNU
SISTER NIVEDITA UNIVERSITY

2020

SYLLABUS

School of Natural Sciences

B.Sc. (H) in Mathematics under UGC – CBCS

SISTER NIVEDITA UNIVERSITY
DEPARTMENT OF MATHEMATICS

B.Sc. Mathematics (H) Course Structure

Category definition with credit breakup

Semester	Credit						
	CC	DSE	GE	AECC	SEC	USC	Total/Sem
First	12		4	2		2	20
Second	12	6	4	2	1	2	27
Third	12	6	4	2	1	2	27
Fourth	12	6	4	2	1	2	27
Fifth	18	6			1		25
Sixth	24						24
Total Credit/ Course	90	24	16	8	4	8	
Total Credit							150

CC: Core Courses; **GE**: General Elective; **AECC:** Ability Enhancement Compulsory Course; **SEC**: Skill Enhancement Courses; **DSE**: Discipline Specific Elective; **USC:** University specified course

First Year

Category	Course Name	Credit	Teaching Scheme		
			L	T	P
Semester – I					
CC – 1	Classical and Modern Algebra	6	6	0	0
CC – 2	Analytical Geometry of two and three dimensions	6	6	0	0
GE – 1	Generic Elective (Introductory Microeconomics)	4	4	0	0
AECC – 1	Communicative English – I	2	2	0	0
USC – 1	Foreign Language I	2	2	0	0
Total Credit = 20			Teaching Hour = 20		
Semester – II					
CC – 3	Linear Algebra	6	4	2	0
CC – 4	Real Analysis	6	6	0	0
DSE – 1	Boolean Algebra &Automata theory	6	6	0	0
GE – 2	Generic Elective	4	4	0	0
AECC – 2	Communicative English – II	2	2	0	0
SEC – 1	Mentored Seminar – I	1	1	0	0
USC – 2	Foreign Language II	2	2	0	0
Total Credit = 27			Teaching Hour = 27		

Second Year

Category	Course Name	Credit	Teaching Scheme		
			L	T	P
Semester – III					
CC – 5	Riemann Integration	6	6	0	0
CC – 6	Ordinary differential equations	6	6	0	0
DSE – 2	Data Structures with C	6	4	0	4
GE – 3	Generic Elective (Thought History of Economic)	4	4	0	0
AECC – 3	Environmental Science – I	2	2	0	0
SEC – 2	Mentored Seminar – II	1	1	0	0
USC – 3	Foreign Language III	2	2	0	0
Total Credit = 27			Teaching Hour = 29		
Semester – IV					
CC – 7	Vector analysis and Vector Calculus	6	6	0	0
CC – 8	Partial differential equations and Dynamical system	6	6	0	0
DSE – 3	Discrete Mathematics or Bio Mathematics	6	6	0	0
GE – 4	Generic Elective	4	4	0	0
AECC – 3	Environmental Science – II	2	2	0	0
SEC – 3	Mentored Seminar – III	1	1	0	0
USC – 4	Foreign Language – IV	2	2	0	0
Total Credit = 27			Teaching Hour = 27		

Third Year

Category	Course Name	Credit	Teaching Scheme		
			L	T	P
Semester – V					
CC – 9	Probability and Statistics	6	6	0	0
CC – 10	Mechanics of particles	6	6	0	0
CC – 11	Application of Calculus and series of functions	6	6	0	0
DSE – 4	Linear Programming and games theory +lab	6	4	0	4
SEC – 4	Mentored Seminar – IV	1	1	0	0
Total Credit = 25			Teaching Hour = 27		
Semester – VI					
CC – 12	Numerical Analysis	4	4	0	0
	Numerical Analysis Lab with R	2	0	0	4
CC – 13	Metric Spaces and Complex Analysis	6	6	0	0
CC – 14	Tensor Calculus and Laplace Transform	6	6	0	0
CC – 15	Project	6	0	0	12
Total Credit = 24			Teaching Hour = 32		