

**SRI KALISWARI COLLEGE (AUTONOMOUS), SIVAKASI**  
**(Affiliated to Madurai Kamaraj University, Re-accredited with A Grade (CGPA 3.11) by NAAC)**  
**MINUTES OF BOARD OF STUDIES MEETING**

Name of the Department : **Mathematics.**

Date : 13.07.2021

**Members Present**

<b>S.No.</b>	<b>Board Members</b>	<b>Name and Designation</b>
1.	Chairman of the Board	Ms.K.Lalithambigai Head & Assistant Professor of Mathematics Sri Kaliswari College, Sivakasi.
2.	University Nominee	Dr.S.Lalithambigai Assistant Professor Department of Mathematics Madurai Kamaraj University Madurai
3.	Academic Expert 1	Dr. C.Parameswaran Associate Professor and Head Centre for Research and Post Graduate Studies in Mathematics, Ayya Nadar Janaki Ammal College Sivakasi.
4.	Academic Expert 2	Dr. M.Jeyaraman Assistant Professor Department of Mathematics R.D. Government Arts College Sivagangai
5.	Alumnus	Dr.G.Ramkumar Assistant Professor Department of Mathematics Arul Anandar College Karumathur

Members		
6.	Dr.A.Subramanian,	Guest Faculty in Mathematics
7.	Mrs.M.Kaleeswari	Assistant Professor of Mathematics
8.	Ms.M.Theivanayaki	Assistant Professor of Mathematics
9.	Mrs.M.Andal	Assistant Professor of Mathematics
10.	Mrs.J.Maria Jeya Priya	Assistant Professor of Mathematics
11.	Ms.N.Maheswari	Assistant Professor of Mathematics
12.	Dr.G.Sangeetha	Assistant Professor of Mathematics
13.	Mr.T.Gurunathan	Assistant Professor of Mathematics
14.	Mrs.S.Mahalakshmi	Assistant Professor of Mathematics
15.	Mrs.S.Anubala	Assistant Professor of Mathematics

The Board of Studies Meeting was held on 13<sup>th</sup> July, 2021 through Virtual Mode. On the basis of the feedback received from stakeholders, the revised syllabi under OBE for B.Sc (Mathematics), M.Sc. (Mathematics) and Certificate Courses were presented before the Board of Studies Meeting.

The following recommendations were incorporated in the syllabi in accordance with the suggestions given by the members of the board.

## B.Sc. Mathematics

S.No	Semester	2018-2021		2021-2024		Content/ Unit	Retained/ Deleted/ Changed/ Introduced the New Course	Justification
		COURSE CODE	COURSE NAME	COURSE CODE	COURSE NAME			
1.	I	18UMAC11	Core Course -I: Foundation Course- Basic Mathematics					Since the content of this course is included in the revised syllabus of higher secondary, this course is eliminated.
2.				21UMAC11	Core Course - I : Differential Calculus			Content of Unit I – IV retained from Calculus and its Applications (18UMAC12). Curve Tracing included in Unit V
3.		18UMAC12	Core Course -II: Calculus and its Applications				Changed the course	Unit I – IV is included in Differential Calculus (21UMAC11) and Unit V Is included in Integral Calculus and Fourier Series (21UMAS11)
4.				21UMAC12	Core Course - II : Analytical Geometry-3D		Shifted from Semester II and Textbook Changed	
5.		18UMAN11	Non-Major Elective Course - I: Fundamentals of Mathematics				Shifted to Semester- III	To give better understanding of the Interdisciplinary Courses, it is shifted to Semester III.
6.				21UMAS11	Skill Enhancement Course I : Integral Calculus and Fourier Series			Content of Unit I and IV retained from Calculus and its Applications (18UMAC12).

								Content of Units II, III and V are included.
7.	II	18UMAC21	Core Course -III: Classical Algebra	21UMAC21	Core Course - III : Classical Algebra	Unit I		Equivalence Relation included
						Unit V		Biquadratic Equations included
8.		18UMAC22	Core Course -IV: Analytical Geometry-3D				Shifted to Semester I	
9.				21UMAC22	Core Course - IV : Summation of Series and Trigonometry	Unit I	Introduced	
						Units II - V	Retained as in the Course Trigonometry (18UMAS31)	
10.		18UMAN21	Non-Major Elective Course-II: Statistical Methods				Shifted to Semester- IV	To enhance the understanding of the Interdisciplinary Courses, it is shifted to Semester IV.
11.		18UMAE21	Enrichment Course-II: Astronomy				Shifted to Semester III	
12.				21UMAS21	Skill Enhancement Course - II: Data Interpretation		Shifted from Semester III and Textbook changed	
13.	III	18UMAC31	Core Course -V: Sequences and Series	21UMAC31	Core Course - V : Sequences and Series		Retained	
14.		18UMAC32	Core Course -VI: Numerical Methods				Shifted to Semester V as Elective Course	
15.				21UMAC32	Core Course - VI : Mathematical Statistics		Shifted from Semester V and Curve fitting and Principal of Least Squares included	
16.		18UMAS31	Skill Based Course-I: Trigonometry				Shifted to Semester II	

17.				21UMAN31	Non Major Elective Course - I : Fundamentals of Mathematics		Shifted from Semester I and the content of Matrices, Differential Calculus are eliminated and Logarithms, Linear Equations and Progressions are included.	
18.		18UMAV31	Value Based Course-I: Data Interpretation				Shifted to Semester II	
19.				21UMAS31	Skill Enhancement Course - III: Astronomy		Shifted from Semester II	
20.	IV	18UMAC41	Core Course -VII: Mechanics	21UMAC41	Core Course - VII : Mechanics	Unit I	Conditions of Equilibrium of any number of forces acting upon a particle is included	
21.		18UMAC42	Core Course -VIII: Differential Equations and its Applications				Shifted to Semester V	
22.				21UMAC42	Core Course - VIII : Sampling Theory		Newly Introduced course	
23.		18UMA041	Major Elective Course-I: 1. Vector Calculus				Shifted to Semester VI as Core Course	
24.		18UMA042	Major Elective Course-I: 2. Consumer Affairs				Changed the course	
25.		18UMA043	Major Elective Course-I: 3. Discrete Mathematics				Shifted to Semester V	

26.				21UMAM41	Self-paced Learning (Swayam Course) 1. Basic Calculus 1 and 2		Introduced the new course	To mobilize credit transfer through self-directed learning
27.				21UMAM42	Self-paced Learning (Swayam Course) 2. Multivariable Calculus		Introduced the new course	To mobilize credit transfer through self-directed learning
28.				21UMAN41	Non Major Elective Course - II: Introduction to Numerical Computations		Newly Introduced course	
29.				21UMAS41	Skill Enhancement Course - IV: Statistical Distributions		Newly Introduced course	
30.	V	18UMAC51	Core Course -IX: Modern Algebra	21UMAC51	Core Course - IX : Abstract Algebra		Course title is changed	
31.		18UMAC52	Core Course-X: Real Analysis	21UMAC52	Core Course - X : Real Analysis		Textbook is changed	
32.		18UMAC53	Core Course -XI: Operations Research	21UMAC53	Core Course - XI : Operations Research		Inventory Control and Network Scheduling are deleted and Queuing Theory is included	
33.		18UMAC54	Core Course -XII: Mathematical Statistics I				Shifted to Semester III	
34.				21UMAC54	Core Course - XII : Differential Equations and Laplace Transforms		Laplace Transforms is included in Unit V	

35.		18UMA051	Major Elective Course-II: 1. Laplace Transforms and Fourier Series				Content of Laplace Transforms is included in 21UMAC54 Fourier Series is shifted to Semester I	
36.				21UMA051	Major Elective Course - I : 1. Numerical Methods		Shifted from Semester III. Numerical differentiation and integration is deleted and Eigen values and Eigen vectors of a matrix is included.	
37.		18UMA052	Major Elective Course-II: 2. Introduction to Fractals				The course is removed	To introduce the computational course Calculus of Finite Differences, it is deleted.
38.				21UMA052	Major Elective Course - I : 2. Calculus of Finite Differences		Newly Introduced course	
39.		18UMA053	Major Elective Course-II: 3. Fuzzy Sets and Logic				The course is removed	To introduce the computational course Probability Theory and Theory of Attributes, it is deleted.
40.				21UMA053	Major Elective Course - I : 3. Probability Theory and Theory of Attributes		Newly Introduced course	

41.				21UMA054	Major Elective Course - II : Discrete Mathematics		Shifted from Semester IV and The content of Coding Theory, Automata Theory are deleted and Functions, Recurrence relations and generating functions, Algebraic Systems are introduced.	
42.				21UMA055	Major Elective Course - II : Integral Transforms		Newly Introduced course	
43.				21UMA056	Major Elective Course - II : Coding Theory		Newly Introduced course	
44.		18UMAS51	Skill Based Course-II: Transform Techniques				The Course is removed.	To introduce the course Integral Transforms, it is deleted.
45.		18UMAS52	Skill Based Course-III: Quantitative Aptitude				Converted as a Certificate Course	
46.	VI	18UMAC61	Core Course -XIII: Linear Algebra	21UMAC61	Core Course - XIII : Linear Algebra		Retained	
47.		18UMAC62	Core Course -XIV: Complex Analysis	21UMAC62	Core Course - XIV : Complex Analysis		Retained	
48.		18UMAC63	Core Course -XV: Graph Theory	21UMAC63	Core Course - XV : Graph Theory		Retained	



49.		18UMAC64	Core Course -XVI: Mathematical Statistics II				Converted as a Certificate Course	
50.				21UMAC64	Core Course - XVI : Vector Calculus		Shifted from Semester IV	
51.				21UMAJ61	Core Course - XVII : Project		Newly Introduced course	Based on the Feedback received from the staff members, it is introduced
52.		18UMA061	Major Elective Course- III: 1.Mathematical Modeling				Converted as a Certificate Course	
53.				21UMA061	Major Elective Course - III : 1. Resource Management Techniques		Newly Introduced course	
54.		18UMA062	Major Elective Course- III: 2.Stochastic Processes				The course is removed	To introduce the computational course Project Network Techniques, it is deleted.
55.				21UMA062	Major Elective Course - III : 2. Project Network Techniques		Newly Introduced course	
56.		18UMA063	Major Elective Course- III: 3.Optimization Techniques	21UMA063	Major Elective Course - III : 3. Mathematical Programming Techniques		The course title is changed	
57.		18UMAS61	Skill Based Course-IV: Lattices and Boolean Algebra				The course is removed	To introduce the practical course Computational Methods in Octave, it is deleted.
58.				21UMAS61	Skill Enhancement Course - VI:		Newly Introduced	Based on the Feedback received from the students,

					Practical – Computational Methods in Octave		course	the course is newly introduced
59.				21UMAE61	Comprehensive Examination		Newly Introduced course	

### Certificate Courses for UG Programme

S.No	Semester	2018-2021		2021-2024		Content/ Unit	Retained/ Deleted/ Changed/ Introduced the New Course	Justification
		COURSE CODE	COURSE NAME	COURSE CODE	COURSE NAME			
1.				21UMAEX1	Certificate Course in Numerical Aptitude		The content of the course Quantitative Aptitude (18UMAS52) are included in this course	
2.				21UMAEX2	Certificate Course in Statistics Models in Predictive Analytics		The content of the course Mathematical Statistics II (18UMAC64) are included in this course	
3.				21UMAEX3	Certificate Course in Actuarial Mathematics		Newly Introduced course	
4.				21UMAEX4	Certificate Course in Mathematical Modelling		The content of the course Mathematical Modeling (18UMA061) are included in this course	

## Courses offered to Other Departments

S.No	Semester	2018-2021		2021-2024		Content/ Unit	Retained/ Deleted/ Changed/ Introduced the New Course	Justification
		COURSE CODE	COURSE NAME	COURSE CODE	COURSE NAME			
1.	I	18UPHA11/ 18UCHA11	Allied Course – I: Mathematics – I	21UPHA11/ 21UCHA11	Allied Course-I: Mathematics - I	Units I - V	Changed	Based on the Feedback received from the students, the changes have been made
2.	II	18UPHA21/ 18UCHA21	Allied Course – II: Mathematics - II	21UPHA21/ 21UCHA21	Allied Course-II: Mathematics – II	Units I - V	Changed	Based on the Feedback received from the students, the changes have been made
3.	I	18UCSA11/ 18UITA11/ 18UCAA11	Allied Course – I: Mathematical Foundations	21UCSA11/ 21UITA11/ 21UCAA11	Allied Course-I: Mathematical Foundations		Textbook changed	
4.	II	18UCSA21/ 18UITA21/ 18UCAA21	Allied Course - II: Operations Research	21UCSA21/ 21UITA21/ 21UCAA21	Allied Course-II: Operations Research		Textbook changed	
5.	III	18UCSA31	Allied Course – III: Numerical Methods and its Applications	21UCSA31	Allied Course - III: Numerical Methods For Scientific Computation		Textbook changed	

## M.Sc. Mathematics

S.No	Semester	2018-2021		2021-2024		Content/ Unit	Retained/ Deleted/ Changed/ Introduced the New Course	Justification
		COURSE CODE	COURSE NAME	COURSE CODE	COURSE NAME			
1.	I	18PMAC11	Core Course – I : Algebra I	21PMAC11	Core Course - I: Abstract Algebra		Course title changed	The content of vector space is deleted and Extension field, the elements of Galois theory are included.
2.		18PMAC12	Core Course – II : Real Analysis	21PMAC12	Core Course - II: Real Analysis	Unit I	Content in the real number system is deleted.	
3.		18PMAC13	Core Course – III : Graph Theory I	21PMAC13	Core Course - III: Graph Theory and Algorithms		Textbook changed	
4.		18PMAC14	Core Course – IV : Statistics	21PMAC14	Core Course - IV: Mathematical Statistics		Retained	
5.		18PMA011	Major Elective Course - I 1. Combinatorial Mathematics	21PMA011	Elective Course - I: 1. Combinatorial Techniques		Retained	
6.		18PMA012	Major Elective Course - I 2. Automata and Formal Languages	21PMA012	Elective Course - I: 2. Numerical Computation Techniques		Course title changed and shifted from Semester III.	
7.		18PMA013	Major Elective Course - I 3. Modern Applied Algebra				The course is removed	To introduce the course Functions of Several Variables which is used to face NET Examination, it is deleted.

8.				21PMA013	Elective Course - I: 3. Formal Languages and Automata Theory		Unit I Deleted from 18PMA012 and Properties of Context – Free Languages is included	
9.	II	18PMAC21	Core Course – V : Algebra II	21PMAC21	Core Course - V: Linear Algebra		Content of Vector space is included. Extension Field and The elements of Galois Theory are shifted to Abstract Algebra	
10.		18PMAC22	Core Course – VI : Measure Theory	21PMAC22	Core Course - VI: Measure Theory		The product measures and integral operators are eliminated	The content is too vague
11.		18PMAC23	Core Course – VII : Differential Equations	21PMAC23	Core Course - VII: Ordinary and Partial Differential Equations		Retained	
12.		18PMAC24	Core Course – VIII : Classical Mechanics				Shifted to Semester IV	
13.				21PMAC24	Core Course - VIII: Differential Geometry		Shifted from Semester III	
14.		18PMAN21	Non - Major Elective Course Fundamentals of Statistics				The course is removed	Since the content of this course is included in other PG Programmes as Core / Elective Course, this course is eliminated.
15.				21PMAN21	Non Major Elective Course : Numerical Computation		Newly Introduced Course	

					Methods			
16.	III	18PMAC31	Core Course – IX : Functional Analysis	21PMAC31	Core Course - IX: Functional Analysis		Retained	
17.		18PMAC32	Core Course – X : Operations Research	21PMAC32	Core Course - X: Optimization Techniques		Course Title is changed	
18.		18PMAC33	Core Course – XI: . Fuzzy Analysis				Converted as a Elective Course	
19.		18PMAC34	Core Course – XII : Topology	21PMAC33	Core Course - XI: Topology		Retained	
20.				21PMAC34	Core Course - XII: Research Methodology		Newly Introduced Course	Based on the Feedback received from the students, the course is newly introduced
21.		18PMA031	Major Elective Course – II 1. Advanced Numerical Analysis				Shifted to Semester I	
22.				21PMA031	Elective Course - II: 1. Functions of Several Variables		Newly Introduced course	To face the NET Examination, it is introduced.
23.		18PMA032	Major Elective Course – II 2. Graph Theory II				The course is deleted	Based on the Feedback received from the students, the core course Research Methodology is newly introduced and his course is deleted.
24.				21PMA032	Elective Course - II: 2. Fuzzy Mathematics		Textbook changed	

25.		18PMA033	Major Elective Course – II 3. Differential Geometry				Shifted to Semester II	
26.				21PMA033	Elective Course - II: 3. Elements of Stochastic Processes		Shifted from Semester IV	
27.				21PMAM31	Self-paced Learning (Swayam Course) 1.Introduction to Methods of Applied Mathematics		Introduced the new course	To mobilize credit transfer through self-directed learning
28.				21PMAM32	2. Regression Analysis		Introduced the new course	To mobilize credit transfer through self-directed learning
29.	IV	18PMAC41	Core Course – XIII : Complex Analysis	21PMAC41	Core Course - XIII: Complex Analysis	Unit I, II	Deleted	The concepts under series and product developments are included.
30.		18PMAC42	Core Course – XIV : Number Theory and Cryptography	21PMAC42	Core Course - XIV: Number Theory and Cryptography		Textbook changed	
31.		18PMAC43	Core Course – XV : Stochastic Processes				Shifted to Semester III	
32.				21PMAC43	Core Course - XV: Integral Equations		Newly introduced course	To face the NET Examination, it is introduced.
33.		18PMAC44	Core Course – XVI: Advanced Topology				The course is removed	To introduce the course Integral Equations, it is removed
34.				21PMAC44	Core Course - XVI: Mechanics		Shifted from Semester II	
35.		18PMAJ41	Core Course – XVII : Project	21PMAJ41	Core Course - XVII: Project		Retained	

### Certificate Courses for PG Programme

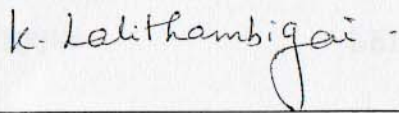

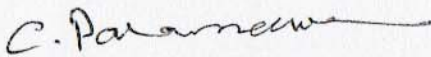


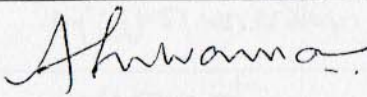
S.No	Semeste	2018-2021		2021-2024		Content/ Unit	Retained/ De- leted/ Changed/ Introduced the New Course	Justification
		COURSE CODE	COURSE NAME	COURSE CODE	COURSE NAME			
1.				21PMAEXP	Certificate Course in Data Analysis		Newly Introduced Course	
2.		18PMAEX1	Preparatory Course for NET/SET in Mathematical Sciences - Level I	21PMAEX1	Preparatory Course for NET/SET in Mathematical Sciences - Level I		Retained	
3.		18PMAEX2	Preparatory Course for NET/SET in Mathematical Sciences - Level II	21PMAEX2	Preparatory Course for NET/SET in Mathematical Sciences - Level II		Retained	

The Board Members suggested the following:

1. Instead of having Swayam Course as a compulsory course, it can be taken as a Extra Credit Course.
2. Textbook and Reference Books quoted can be of revised / recent edition.
3. Chapters and Sections of the textbook can be mentioned in the syllabus of the course



## Members Present

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1.	Chairman of the Board	Ms.K.Lalithambigai Head & Assistant Professor of Mathematics Sri Kaliswari College, Sivakasi.	
2.	University Nominee	Dr.S.Lalithambigai Assistant Professor Department of Mathematics Madurai Kamaraj University Madurai	
3.	Academic Expert 1	Dr. C.Parameswaran Associate Professor and Head Centre for Research and Post Graduate Studies in Mathematics, Ayya Nadar Janaki Ammal College Sivakasi.	
4.	Academic Expert 2	Dr. M.Jeyaraman Assistant Professor Department of Mathematics R.D. Government Arts College Sivagangai	
5.	Alumnus	Dr.G.Ramkumar Assistant Professor Department of Mathematics Arul Anandar College Karumathur	
Members			
6.	Dr.A.Subramanian,	Guest Faculty in Mathematics	

7.	Mrs.M.Kaleeswari	Assistant Professor of Mathematics	H. Brij
8.	Ms.M.Theivanayaki	Assistant Professor of Mathematics	M.Theivanayaki
9.	Mrs.M.Andal	Assistant Professor of Mathematics	M. Andal
10.	Mrs.J.Maria Jeya Priya	Assistant Professor of Mathematics	J. Priya
11.	Ms.N.Maheswari	Assistant Professor of Mathematics	N. Maheswari
12.	Dr.G.Sangeetha	Assistant Professor of Mathematics	G. Sangeetha
13.	Mr.T.Gurunathan	Assistant Professor of Mathematics	T. Gurunathan
14.	Mrs.S.Mahalakshmi	Assistant Professor of Mathematics	S. Mahalakshmi
15.	Mrs.S.Anubala	Assistant Professor of Mathematics	S. Anubala

K. Kalithambigai  
Signature of Chairman of the Board

S. Femina  
Dean of Academic Affairs

P. T.  
PRINCIPAL