ಸಂತಅಲೋಶಿಯಸ್ ಕಾಲೇಜು (ಸ್ವಾಯತ್ರ) ಮಂಗಳೂರು- 575 003 www.staloysius.edu.in



ST ALOYSIUS COLLEGE(AUTONOMO MANGALURII MANGALURU Phone: 0824-2449700, 2450 Fax: 0824-24497 Email: principal@staloysiu_{5.ed}

Re-accredited by NAAC with 'A' Grade with CGPA 3.62/4 Recognised by UGC as "College with Potential for Excellence" Conferred "College with "STAR STATUS" by DBT, Government of India. Centre for Research Capacity Building under UGC-STRIDE

Date: 17-08-2022

NOTIFICATION

Sub: Syllabus of **B.Sc. MATHEMATICS** under NEP Regulations, 2021. (As per Mangalore University guidelines)

- Ref: 1. Decision of the Academic Council meeting held on 18-12-2021 vide Agenda No: 6.21(2021-22)
 - 2. Decision of the Academic Council meeting held on 09-07-2022 vide Agenda No:14
 - 3 Office Notification dated 21-02-2022.
 - 4. Office Notification dated 17-08-2022

Pursuant to the above, the Syllabus of B.Sc. MATHEMATICS under NEP Regulations. 2021 which was approved by the Academic Council at its meeting held on 18-12-2021& 09-07-2022 is hereby notified for implementation with effect from the academic year 2021-22.

CIPAL

To:

- 2. The Registrar Office
- 3. Library

1. The Chairman/Dean/HOD

REGISTRAR

Board of Studies meeting held on 20th November 2021 chaired by Ms Priya Monteiro, Head of the Department.

Members present:

- 1. Dr Adelaide Saldanha, HOD, Department of Mathematics, St Agnes College (Autonomous), Mangaluru.
- 2. Mr Udaya K, HOD of Mathematics, St Philomena College, Puttur.
- 3. Dr John Edward Dsilva
- 4. Ms Melvita Leema Baretto
- 5. Ms Rollin Preetha Vaz
- 6. Ms Shaila Priya Rodrigues

Programme Outcomes (PO):

By the end of the program it is expected that the students will be benefited by the following:

PO 1	Disciplinary Knowledge : Bachelor degree in Mathematics is the culmination
	of in-depth knowledge of Algebra, Calculus, Geometry, differential equations
	and several other branches of pure and applied mathematics. This also leads to
	study the related areas such as computer science and other allied subjects
PO 2	Communication Skills : Ability to communicate various mathematical
	concepts effectively using examples and their geometrical visualization. The
	skills and knowledge gained in this program will lead to the proficiency in
	analytical reasoning which can be used for modeling and solving of real life
	problems.
PO 3	Critical thinking and analytical reasoning: The students undergoing the
	programme acquire ability of critical thinking and logical reasoning and
	capability of recognizing and distinguishing the various aspects of real life
	problems.
PO 4	Problem Solving: The Mathematical knowledge gained by the students
	through the programme develop an ability to analyze the problems, identify
	and define appropriate computing requirements for its solutions. This

Assessment

Type of Course	Formative Assessment/	Summative Assessment					
	I.A.	(S.A.)					
Theory	40%	60 %					
Practical	50%	50 %					
Projects	40%	60 %					
Experiential Learning							
(Internship etc.)							

Weightage for the Assessments (in percentage)

Structure under NEP

Course Code Title of course		Category	ory Teaching		CIE	Total	Credits				
		of course	hours per			Marks					
			week								
SEMESTER I											
G 503 DC1.1	Number Theory - I, Algebra - I	DSC	4	60	40	100	4				
	and Calculus - I										
G 503 DC2.1P	Theory based practicals on	DSC	4	25	25	50	2				
	Number Theory – I, Algebra -										
	I and Calculus - I										
G 503 OE1.1	Mathematics - I	OEC	3	60	40	100	3				
Total credit							9				
SEMESTER II	·										
G 503 DC1.2	Number Theory - II, Algebra -	DSC	4	60	40	100	4				
	II and Calculus - II										
G 503 DC2.2P	Theory based practicals on	DSC	4	25	25	50	2				
	Number Theory – II, Algebra -										
	II and Calculus - II										
G 503 OE1.2	Mathematics - II	OEC	3	60	40	100	3				
Total credit							9				

೦ತಆಲೋಶಿಯಸ್ ಕಾಲೇಜು (ಸ್ವಾಯತ್ತ) ೨೦ಗಳೂರು– 575 003 vww.staloysius.edu.in

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Date: 17-08-2022

NOTIFICATION

Sub: Syllabus of **B.Sc. STATISTICS** under NEP Regulations, 2021. (As per Mangalore University guidelines)

- Ref: 1. Decision of the Academic Council meeting held on 18-12-2021 vide Agenda No: 6.22 (2021-22)
 - 2. Decision of the Academic Council meeting held on 09-07-2022 vide Agenda No 14
 - 3. Office Notification dated 21-02-2022
 - 4. Office Notification dated 17-08-2022

Pursuant to the above, the Syllabus of **B.Sc. STATISTICS** under NEP Regulations, 2021 which was approved by the Academic Council at its meeting held on 18-12-2021 & 09-07-2022 is hereby notified for implementation with effect from the academic year **2021-22**.

PRINCIPAL

Co:

- 1. The Chairman/Dean/HOD.
- 2. The Registrar Office
- 3. Library



REGISTRAR

A meeting of the Board of Study in Statistics was held on 19/11/2021

Following members were present for the meeting.

- 1. Dr. Aruna Kalkur T (Chairperson)
- Dr. Savitha Kumari (University Nominee), Associate Professor of Statistics, SDM College Ujire.
- 3. Mr. Umesh Pai (Subject Expert), Associate Professor of Statistics, MGM College, Udupi
- 4. Dr. Ashwini Kumari (Subject Expert), Asst. Professor of Statistics, Alva's College, Moodbidri
- 5. Ms. Sonal Caren D'souza, (Member) SAC, Mangaluru
- 6. Ms. Felicia Roza Martis, (Member) SAC, Mangaluru
- 7. Ms. Anvitha Jain (Member) SAC, Mangaluru
- 8. Ms. K Varsha (Student Representative)

Statistics BOS meeting conducted on 27/06/2022

The following members were present for BOS:

- 1. Dr. Aruna Kalkur T (Chairperson)
- 2. Dr. Savitha Kumari (University Nominee), Associate Professor of Statistics, SDM College Ujire.
- 3. Mr. Umesh Pai (Subject Expert), Associate Professor of Statistics, MGM College, Udupi
- 4. Dr. Ashwini Kumari (Subject Expert), Asst. Professor of Statistics, Alvas College, Moodbidri.
- 5. Ms. Sonal Caren D'souza, (Member) SAC, Mangaluru
- 6. Ms. Felicia Roza Martis, (Member) SAC, Mangaluru
- 7. Ms. Anvitha Jain (Member) SAC, Mangaluru
- 8. Ms. K Varsha (Student Representative)

Program Outcomes

By the end of the program the students will be able to:

- 1. Develop and demonstrate an ability to understand major concepts in various disciplines of Statistics.
- 2. Solve analytical problems independently and draw logical conclusions.
- 3. Analyse, interpret the data and hence help policy makers to take a proper decision.
- 4. Have a knowledge regarding use of data analytics tools like Excel, SPSS, R programming and Python.
- 5. Use modern statistical techniques and statistical Software to understand the concepts of Statistics.
- 6. Think, acquire knowledge and skills through logical reasoning and inculcate the culture of self-learning.
- 7. Create an awareness about the impact of Statistics in real life and development outside the scientific community.

Course Code	Title of course	Category	Teaching	SEE	CIE	Total	Credits			
		of	hours			Marks				
		course	per week							
SEMESTER I										
G 506 DC1.1	Descriptive Statistics	DSC	04	60	40	100	4			
G 506 DC2 1 P	Descriptive Statistics	DSC	04	60	40	100	2			
0.500.002.11	Practical	050								
G 506 OE1.1	Statistical Methods	OEC	03	60	40	100	2			
SEMESTER II										

Course Structure

G 506 DC1.2		Probab Distrib	vility and outions		DSC		04		60	40	100	4	
G 506 DC2.2 P		Probab Distrib Practic	ility and utions al		DSC	04			60	40	100	2	
G 506 OE1.2		Applied	<mark>d Statistics</mark>		OEC		03	60 4		40	100	2	
 III Calculus and Probability Distributions (4 +Practical (2) Discipline B3(4+ 		nd y ons (4) (2) 33(4+2)	OE-3 (3)	[] [] []	L1-3 (3), L2-3(3) 1+0 each)			S Aı Inte (2)	EC-2: tificial elligenc (1+0+2	e 2)			23
IV	IV Statistical Inference-I (4) + Practical (2) Discipline B4(4+2)		OE-4 (3)	L1 L2 (3- ead	-4 (3), -4(3) +1+0 ch)	Coi of	nstitution India(2)	- 4:4		SI	oorts/NCC etc.(2) (1+0+2	/NSS)	25
Exit option with Diploma (96 credits)													