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

REGISTRAR

To:

1. The Chairman/Dean/HOD.

2. The Registrar Office

3. Library

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)
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, 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 Structure

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

G 506 DC1.2	Probability and Distributions	DSC	04	60	40	100	4
G 506 DC2.2 P	Probability and Distributions Practical	DSC	04	60	40	100	2
G 506 OE1.2	<mark>Applied Statistics</mark>	OEC	03	60	40	100	2

III	**Calculus and Probability Distributions (4) +Practical (2)** Discipline B3(4+2)	OE-3 (3)	L1-3 (3), L2-3(3) (3+1+0 each)		SEC-2: Artificial Intelligence (2) (1+0+2)		23
IV	**Statistical Inference-I (4) + Practical (2)** Discipline B4(4+2)	OE-4 (3)	L1-4 (3), L2-4(3) (3+1+0 each)	Constitution of India(2)		Sports/NCC/NSS etc.(2) (1+0+2)	25
	Exit option with Diploma (96 credits)						

Date: 17-08-2022

NOTIFICATION

Sub: Syllabus of **B.Sc. COMPUTER SCIENCE** 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: 6.25(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. COMPUTER SCIENCE** 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   REGISTRAR

To:

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

1 | P a g e

Syllabus Structure of Computer Science Paper as one of the major papers and open elective papers for BSc (Computer Science).

Subject Code	sem	subject	Theory hours/week	Practical hours/week	Duration of exams	Marks and credits			
						IA	Exam	Total	Credits
G505DC1.1	I	Computer Fundamentals and Programming in C	4		03	40	60	100	4
G505DC1.1P	I	C Programming Lab		4	02	25	25	50	2
G505OE1.1	I	Office Automation	3		03	40	60	100	3
G505DC2.2	II	Data Structures using C	4		03	40	60	100	4
G505DC2.2P	II	Data Structures Lab		4	03	25	25	50	2
G505OE2.2	II	Web Designing	3		03	40	60	100	3

Curriculum Structure

Program: B.Sc. (Basic and Honors)   **Subject: Computer Science**

Sem	Discipline Specific Core Courses (DSC)	Theory	Lab	Discipline Specific Elective Courses (DSE)/ Vocational Courses (VC)	Hours/ Week
1	DSC-1: Computer Fundamentals and Programming in C	4			
	DSC-1Lab: C Programming Lab		4		
2	DSC-2: Data Structures using C	4			
	DSC-2Lab: Data structures Lab		4		
3	DSC-3: Object Oriented Programming Concepts and Programming in JAVA	4			
	DSC-3Lab: JAVA Lab		4		
4	DSC-4: Database Management Systems	4			
	DSC-4Lab: DBMS Lab		4		
5	DSC-5: Programming in PYTHON	3		VC-1: Any one from Vocational Courses, Group – 1*	3
	DSC-6: Operating System Concepts	3			
	DSC-5Lab: PYTHON Programming lab		4		
	DSC-6Lab: Operating System lab		4		
6	DSC-7: Internet Technologies	3		VC-2: Any one from Vocational Courses, Group – 2*	3
	DSC-8: Computer Networks	3		Internship:	
	DSC-7Lab: JAVA Script, HTML, CSS Lab		4		
	DSC-8Lab: Computer Networks Lab		4		
7	DSC-9: Computer Graphics and Visualization	3		DSE-1: Any one from Discipline Specific Elective Courses, Group – 1**	3
	DSC-10: Design and Analysis of Algorithms	3		DSE-2: Any one from Discipline Specific Elective Courses, Group – 2**	3
	DSC-11: Software Engineering	3			
	DSC-9Lab: Computer Graphics and Visualization Lab		4		
	DSC-10Lab: Algorithms Lab		4	Research Methodology:	3
8	DSC-12: Artificial Intelligence and Applications	3		DSE-3:	3
	DSC-13: Computer Organization and Architecture	3		DSE-4: Any two from Discipline Specific Elective Courses, Group – 3	3
	DSC-14: Data Warehousing and Data Mining	3		Research Project:	6

* Vocational Courses

Group-1
• DTP, CAD and Multimedia
• Hardware and Server Maintenance
• Web Content Management Systems
• E-Commerce
• Web Designing

Group-2
• Health Care Technologies
• Digital Marketing
• Office Automation
• Multimedia Processing
• Accounting Package

** Discipline Specific Elective Courses

Group-1
• IoT
• Cyber Law and Cyber Security
• Web Programming - PHP and MySQL
• Clouds, Grids, and Clusters
• Software Testing

Group-2
• Information and Network Security
• Data Compression
• Discrete Structures
• Open source Programming
• Multimedia Computing
• Big Data

Group-3
• Data Analytics
• Storage Area Networks
• Pattern Recognition
• Digital Image Processing
• Parallel Programming
• Digital Signal Processing