SYMBIOSIS INTERNATIONAL (DEEMED UNIVERSITY)

Learning Management System

Academic Year : 2023-2024 Institute/ Branch Name : Symbiosis Statistical Institute   Programme Name : Bachelor of Science (Applied Statistics) Honours/Honours with Research

Report Generated

Color Code Description:

Global	National / Local	Regional / National

Sr. No.	GA No.	Graduate Attributes	PO No.	Programme Outcomes
1	GA1	Scholarship: research, inquiry and lifelong learning	PO1	Rigorous training in Statistics and Data Science will equip students with the necessary scientific skills to develop insights into data analytics proficiently.
2	GA2	Global citizenship: ethical, social and professional understanding	PO2	Students will adeptly apply pertinent statistical and data science methodologies to tackle intricate problems effectively within both business and domain-specific contexts.
3	GA3	Eco-literate: sensitivity towards a sustainable environment	PO3	The program is structured to foster the acquisition of a targeted skill set and values at each learning stage. This emphasis on skill development aims to enhance students' employability prospects in diverse professional domains.
4	GA4	Employability: equipped with skills, attributes, leadership and entrepreneurial qualities that society needs; being capable of making a contribution to society through earning a living	PO4	The program is dedicated to nurturing well-rounded individuals capable of responsible citizenship through a holistic curriculum. It encompasses facets that contribute to both personal and professional development, aligning with the broader objectives of societal responsibility.

Sr. No.	Semester	Institute Course Code	Catalog Course Code	Title	Course Outcome No	Course Outcome Statement	PO1	PO2	PO3	PO4
1	SEM I	0606220201 - PP	THM6034	Introductory Probability and Statistics	CO1	To enable students to understand the basic measures of statistics, random variables and concept of probabilities.	Strong-H	Strong-H	Moderate-M	Moderate-M
1					CO2	The students will be able to understand the measures of location, dispersion	Strong-H	Strong-H	Moderate-M	Moderate-M
1					CO3	The students will be able to interpret the summary features of data.	Moderate-M	Strong-H	Moderate-M	Moderate-M
1					CO4	The students will be able to apply the different statistical methods.	Moderate-M	Moderate-M	Moderate-M	Moderate-M
2	SEM I	0606220202 - PP	T2780	Introduction to Contemporary Business Practices	CO1	The students will understand how and why some business are successful while others are not.	Strong-H	Strong-H	Moderate-M	Moderate-M
2					CO2	To learn from the not so successful companies, how to avoid those pitfalls.	Strong-H	Strong-H	Moderate-M	Moderate-M
2					CO3	Gain an insight into unique strategies to target under-privileged sections of society	Moderate-M	Strong-H	Moderate-M	Moderate-M
2					CO4	Obtain an understanding into organizational learning and its significance	Moderate-M	Moderate-M	Moderate-M	Moderate-M
3	SEM I	0606220203 - PP	T2495	Business Communication	CO1	Understand the meaning and importance of communication in current globalized scenario	Strong-H	Strong-H	Moderate-M	Moderate-M

Sr. No.	Semester	Institute Course Code	Catalog Course Code	Title	Course Outcome No	Course Outcome Statement	PO1	PO2	PO3	PO4
3					CO2	Communicate effectively in a professional environment	Strong-H	Strong-H	Moderate-M	Moderate-M
3					CO3	Communicate effectively in a professional environment	Moderate-M	Strong-H	Moderate-M	Moderate-M
3					CO4	Effectively use latest communication technologies	Moderate-M	Moderate-M	Moderate-M	Moderate-M
4	SEM I	0606220204 - PP	T6983	Statistical Data Analysis Using Microsoft Excel	CO1	Remember various important commands in MS-Excel	Strong-H	Strong-H	Moderate-M	Weak-L
4					CO2	Understand the various functions	Strong-H	Strong-H	Moderate-M	Weak-L
4					CO3	Apply Vlookup, Hlookup, MACROs	Strong-H	Strong-H	Moderate-M	Weak-L
4					CO4	To develop the Data Processing skills in MS Excel and develop the Data Visualization skills.	Strong-H	Strong-H	Moderate-M	Weak-L
5	SEM I	0606220205 - PP	T6925	Cultural and Heritage Education	CO1	To understand the importance of Indian culture and heritage of Pune city.	Moderate-M	Moderate-M	Strong-H	Strong-H
5					CO2	To understand the cultural knowledge exchange, asset and its protection and maintenance.	Moderate-M	Moderate-M	Strong-H	Strong-H
5					CO3	To acquire and apply inter- and intra- cultural understanding for holistic development of an individual.	Moderate-M	Moderate-M	Strong-H	Strong-H
5					CO4	To understand ways in which the heritage and culture can be protectedand maintained.	Moderate-M	Moderate-M	Strong-H	Strong-H
6	SEM I	0606220206 - PP	T4005	Integrated Disaster Management	CO1	To provide students knowledge of the social factors affecting disaster	Strong-H	Strong-H	Moderate-M	Moderate-M
6					CO2	To equip students with skills of mitigation, preparedness, response, and recovery.	Strong-H	Strong-H	Moderate-M	Moderate-M
6					CO3	To prepare them to apply life saving skills like using fire extinguisher	Strong-H	Strong-H	Moderate-M	Moderate-M
6					CO4	To help them analyze various and respons to various life saving situations.	Strong-H	Strong-H	Moderate-M	Moderate-M
7	SEM II	0606220201 - PP	T6980	Probability Distributions	CO1	To recall the basic concepts of probability	Strong-H	Strong-H	Moderate-M	Strong-H
7					CO2	To understand the concept of random variables and their properties	Strong-H	Strong-H	Strong-H	Strong-H
7					CO3	To apply the knowledge of different distributions for solving numericals	Strong-H	Strong-H	Strong-H	Strong-H
7					CO4	To analyse the different situations pertaining to discrete and continuous distributions.	Strong-H	Strong-H	Strong-H	Moderate-M

7					CO5	To evaluate the small sample tests like t, chi square and F.	Strong-H	Strong-H	Strong-H	Strong-H
					C06	To build and solve problems based on these distributions .	Strong-H	Strong-H	Strong-H	Strong-H
8	SEM II	0606220202 - PP	THM6040	Design and Analysis of Sample Survey	CO1	To recall the basic concepts like sample, data , population etc. in sampling	Strong-H	Strong-H	Moderate-M	Strong-H
					CO2	To understand the different sampling techniques	Strong-H	Strong-H	Strong-H	Strong-H
					CO3	To apply various sampling techniques for different situations	Strong-H	Strong-H	Strong-H	Strong-H
					CO4	To analyse the importance of various sampling techniques	Strong-H	Strong-H	Strong-H	Moderate-M
					CO5	To evaluate the significance of auxiliary information through ratio, regression estimators	Strong-H	Strong-H	Strong-H	Strong-H
					C06	To create a questionnaire for real life situation	Strong-H	Strong-H	Strong-H	Strong-H
9	SEM II	0606220203 - PP	TM2054	Business accounting	CO1	Students recall fundamental accounting concepts, principles, and terminology.	Strong-H	Moderate-M	Strong-H	Moderate-M
					CO2	Students explain accounting principles and interpret financial information.	Strong-H	Strong-H	Moderate-M	Strong-H
					CO3	Students apply accounting concepts and techniques to real-world business scenarios.	Strong-H	Moderate-M	Strong-H	Strong-H
					CO4	Students break down financial information to analyze the financial health of a business.	Strong-H	Strong-H	Moderate-M	Strong-H
					CO5	Students assess the accuracy, validity, and ethical implications of financial information.	Strong-H	Strong-H	Strong-H	Moderate-M
					C06	Students design and implement new accounting processes or financial strategies for businesses.	Strong-H	Strong-H	Strong-H	Strong-H
10	SEM II	0606220204 - PP	T2456	Financial Management	CO1	Remember the fundamentals of the foundation of finance.	Strong-H	Strong-H	Moderate-M	Strong-H
					CO2	Understand techniques used in finance for decision making.	Strong-H	Strong-H	Strong-H	Strong-H
					CO3	Apply the knowledge of different sources of finance in real life situations	Strong-H	Strong-H	Strong-H	Strong-H
					CO4	Analyze the factors affecting working capital Sources of raising capital finance.	Strong-H	Strong-H	Strong-H	Moderate-M
					CO5	Evaluation and measurements of Special Costs Computation of overall cost of Capital based on Historical & Market Weights.	Strong-H	Strong-H	Strong-H	Strong-H
					C06	Build capital Structure Decision	Strong-H	Strong-H	Strong-H	Strong-H
11	SEM II	0606220205 - PP	THM6027	Technical or Report Writing	CO1	To recall concepts related to good English writing	Strong-H	Strong-H	Moderate-M	Strong-H

						CO2	To understand in detail about the outline of Instruction Manual-Instruction.	Strong-H	Strong-H	Strong-H	Strong-H
						CO3	To apply the definition of Technical description and to interpret how a report is prepared.	Strong-H	Strong-H	Strong-H	Strong-H
						CO4	To Analyse different types of reports and to understand how it differs from writing an essay.	Strong-H	Strong-H	Strong-H	Moderate-M
						CO5	To Evaluate the structure an organisation of a technical report.	Strong-H	Strong-H	Strong-H	Strong-H
						C06	To develop and solve various assignments on Technical writing and Report writing	Strong-H	Strong-H	Strong-H	Strong-H
12	SEM II	0606220206 - PP	THM6024	Statistical Lyrics		CO1	Students recall key statistical concepts and lyrical elements relevant to the analysis.	Strong-H	Moderate-M	Strong-H	Moderate-M
						CO2	Students explain how statistical methods can be used to analyze lyrical content.	Strong-H	Strong-H	Moderate-M	Strong-H
						CO3	Students apply statistical tools to analyze and interpret lyrical data.	Strong-H	Strong-H	Strong-H	Strong-H
						CO4	Students break down lyrical structures and statistical patterns to interpret underlying themes or cultural trends.	Strong-H	Strong-H	Moderate-M	Strong-H
						CO5	Students critically assess the accuracy and reliability of statistical models used in lyrical analysis.	Strong-H	Strong-H	Strong-H	Moderate-M
						CO6	Students design new statistical models or frameworks for analyzing lyrics in novel ways.	Strong-H	Strong-H	Strong-H	Strong-H
13	SEM II	0606220207 - PP	THM6029	Questionnaire Development		CO1	To recall the basic concepts related to data, data collection, types of data.	Strong-H	Strong-H	Moderate-M	Strong-H
						CO2	Understand about response process	Strong-H	Strong-H	Strong-H	Strong-H
						CO3	To apply the different scales-Like 5 point Likert scale, in various real life situations.	Strong-H	Strong-H	Strong-H	Strong-H
						CO4	To analyse and learn about the mode, privacy and confidentiality of a questionnaire.	Strong-H	Strong-H	Strong-H	Moderate-M
						CO5	Evaluate a questionnaire from beginning till end and to prioritize the hierarchy of questions.	Strong-H	Strong-H	Strong-H	Strong-H
						C06	Design a survey questionnaire.	Strong-H	Strong-H	Strong-H	Strong-H
14	SEM II	0606220208 - PP	THM6026	Data Acquisition Tools		CO1	Students recall key concepts and tools related to data acquisition.	Strong-H	Strong-H	Moderate-M	Strong-H
						CO2	Students explain the functions and principles behind data acquisition systems and tools.	Strong-H	Strong-H	Strong-H	Strong-H
						CO3	Students use data acquisition tools to collect and process data in practical applications.	Strong-H	Strong-H	Strong-H	Strong-H
						CO4	Students break down the components of data acquisition systems and analyze their performance.	Strong-H	Strong-H	Strong-H	Moderate-M

No	Sem	Code	Course No	Course Name	CO	Description				
					CO5	Students evaluate the suitability of different data acquisition tools and methods for specific applications.	Strong-H	Strong-H	Strong-H	Strong-H
					C06	Students design and implement a complete data acquisition solution for real-world problems.	Strong-H	Strong-H	Strong-H	Strong-H
15	SEM II	0606220209 - PP	THM6025	Shruti Ganit	CO1	To define the concept of Shruti	Strong-H	Strong-H	Moderate-M	Strong-H
					CO2	To understand the difference between dhvani, nada and shruti	Strong-H	Strong-H	Strong-H	Strong-H
					CO3	To teach correlation of mathematical aspects and its relation to shruti.	Strong-H	Strong-H	Strong-H	Strong-H
					CO4	To Analyse combinations and frequencies of shrutis.	Strong-H	Strong-H	Strong-H	Moderate-M
					CO5	To evaluate Universal law of frequency ratios and shrutis.	Strong-H	Strong-H	Strong-H	Strong-H
					C06	To build project work and observation report	Strong-H	Strong-H	Strong-H	Strong-H
16	SEM II	0606220210 - PP	TH4095	Fitness for life	CO1	Students recall basic fitness concepts, terminology, and the benefits of physical activity.	Strong-H	Strong-H	Strong-H	Strong-H
					CO2	Students explain the importance of physical activity and how different forms of exercise impact overall health.	Strong-H	Strong-H	Strong-H	Strong-H
					CO3	Students apply fitness principles to develop personal exercise routines and healthy habits.	Strong-H	Strong-H	Strong-H	Strong-H
					CO4	Students analyze their own fitness levels and health behaviors to make informed decisions about their fitness journey.	Strong-H	Strong-H	Strong-H	Strong-H
					CO5	Students critically evaluate fitness programs, diet plans, and health advice to make evidence-based decisions.	Strong-H	Strong-H	Strong-H	Strong-H
					C06	Students design a comprehensive, personalized fitness and nutrition program to promote long-term health.	Strong-H	Strong-H	Strong-H	Strong-H
17	SEM III	0606210301 - PP	T6975	Hypothesis Testing	CO1	To understand the role of hypothesis testing in real time problems	Strong-H	Strong-H	Strong-H	Strong-H
					CO2	To recognize the appropriate statistical test for testing variety of hypothesis.	Strong-H	Strong-H	Strong-H	Strong-H
					CO3	To apply the statistical test procedure to test variety of hypothesis	Strong-H	Strong-H	Strong-H	Strong-H
					CO4	To validate required assumptions	Strong-H	Strong-H	Strong-H	Strong-H
18	SEM III	0606210302- PP	T6966	Calculus for Data Science	CO1	Get the knowledge of fundamental principles, methods and tools of Calculus and know how to use them by modelling, solving and interpreting.	Strong-H	Strong-H	Strong-H	Strong-H
					CO2	Able to analyse and describe the behaviour of functions using Limits, derivatives and Integrals.	Strong-H	Strong-H	Strong-H	Strong-H
					CO3	Able to apply concepts of differentiation and Integration in real world situations	Strong-H	Strong-H	Strong-H	Strong-H

					CO4	Interpretation and communication of the results for better strategy making.	Strong-H	Strong-H	Strong-H	Strong-H
19	SEM III	0606210303-PP	T6970	Database Management System	CO1	Understand the core terms, concepts, and tools of relational database management systems.	Strong-H	Strong-H	Strong-H	Strong-H
					CO2	Identify and define the information that is needed to design a database management system for a business information problem.	Strong-H	Strong-H	Strong-H	Strong-H
					CO3	Create conceptual and logical database designs for a business information problem	Strong-H	Strong-H	Moderate-M	Strong-H
					CO4	Build a database management system that satisfies relational theory and provides users with business queries.	Strong-H	Moderate-M	Strong-H	Strong-H
20	SEM III	0606210304-PP	T6774	Principles of Economics	CO1	To explain the students to the most important and basic principles of economics.	Strong-H	Strong-H	Strong-H	Strong-H
					CO2	To enable students to look at the behavior of individuals and institutions involved in the consumption, production and exchange of goods and services	Strong-H	Strong-H	Strong-H	Moderate-M
					CO3	To improve critical thinking, problem solving skills by using economic models and theories	Strong-H	Strong-H	Strong-H	Strong-H
					CO4	To provide a comprehensive coverage of fundamental principles of economics that would enable students to be more effective decision makers in the sphere of economic activities	Strong-H	Strong-H	Strong-H	Moderate-M
21	SEM III	0606210305-PP	T1314	Corporate Governance and Finance	CO1	To give the students a brief overview of the financial transactions and the importance of good governance	Strong-H	Strong-H	Strong-H	Strong-H
					CO2	To enable students to understand Business ethics in an organization	Strong-H	Strong-H	Strong-H	Strong-H
					CO3	To offer the students the basic tenets of good corporate governance in India, US & UK.	Strong-H	Strong-H	Strong-H	Strong-H
					CO4	To equip students with the functioning and environment of corporate governance in India	Strong-H	Strong-H	Strong-H	Strong-H
22	SEM III	0606210306-PP	T4015	Comparative Health Systems	CO1	Understanding of the origins, organization and functioning of a range of international healthcare systems	Strong-H	Strong-H	Strong-H	Strong-H
					CO2	students will be able to appreciate the varied healthcare challenges faced by different countries	Strong-H	Strong-H	Strong-H	Strong-H
					CO3	students will be able to analyze success and failure stories of different countries in comparison to Indian system.	Strong-H	Strong-H	Moderate-M	Strong-H
					CO4	students will be able to compare the healthcare systems different countries.	Strong-H	Strong-H	Strong-H	Strong-H
23	SEM III	0606210307-PP	F6009	Art Integrated Cultural Education	CO1	The student will be able to understand broadly some of the mathematical and statistical concepts.	Strong-H	Strong-H	Moderate-M	Strong-H
					CO2	To conduct some activities related to art and craft during festive session.	Strong-H	Strong-H	Strong-H	Strong-H
					CO3	To create activities that will enable students to observe the statistics and mathematics concepts in the activities.	Strong-H	Strong-H	Strong-H	Strong-H
					CO4	Students will be able to prepare lantern and observe the statistical and mathematical concepts through the preparation.	Strong-H	Strong-H	Strong-H	Moderate-M

24	SEM III	0606210308-PP	T6804	Project - I	CO1	To enable the students to collect real life data.	Strong-H	Strong-H	Strong-H	Strong-H
					CO2	To prepare questionnaire for conducting and collecting the data.	Strong-H	Strong-H	Strong-H	Strong-H
					CO3	Students will be able to analyze the data	Strong-H	Strong-H	Moderate-M	Strong-H
					CO4	To make a student to draw conclusions after the analysis of the data.	Strong-H	Strong-H	Strong-H	Moderate-M
25	SEM III	0606210309-PP	T2883	Core Environmental Studies	CO1	To reinforce and expand on student knowledge of both physical and life science by applying them to environmental concepts	Strong-H	Strong-H	Strong-H	Strong-H
					CO2	To provide another option for students interested in studying science.	Strong-H	Strong-H	Strong-H	Strong-H
					CO3	To create environmental awareness among the students by protecting and conserving the environment	Strong-H	Strong-H	Strong-H	Strong-H
					CO4	To make a student a globally responsible citizen.	Strong-H	Strong-H	Strong-H	Strong-H
26	SEM IV	0606210401-PP	T6972	Designs of Experiments and Analysis	CO1	To describe the fundamental concepts in design of experiments.	Strong-H	Strong-H	Moderate-M	Strong-H
					CO2	To understand the basic terms used in design of experiments.	Strong-H	Strong-H	Strong-H	Strong-H
					CO3	To apply an appropriate experimental design to analyse the experimental data.	Strong-H	Strong-H	Strong-H	Strong-H
					CO4	To analyse the concepts from ANOVA table	Strong-H	Strong-H	Strong-H	Moderate-M
					CO5	To evaluate the various factorial experiments.	Strong-H	Strong-H	Strong-H	Strong-H
					CO6	Construction of layout in total confounding and partial confounding in 23 factorial experiment.	Strong-H	Strong-H	Strong-H	Strong-H
27	SEM IV	0606210402-PP	T6967	Data Science I	CO1	To recall concepts related to data science .	Strong-H	Strong-H	Moderate-M	Strong-H
					CO2	To understand and identify probability distributions commonly used as foundations for statistical modeling.	Strong-H	Strong-H	Strong-H	Strong-H
					CO3	To apply basic tools plots, graphs, summary statistics to carry out EDA.	Strong-H	Strong-H	Strong-H	Strong-H
					CO4	To Apply R to carry out basic statistical modelling and analysis	Strong-H	Strong-H	Strong-H	Moderate-M
					CO5	To evaluate the significance of exploratory data analysis EDA in data science.	Strong-H	Strong-H	Strong-H	Strong-H
					C06	To develop problem solving using statistical software	Strong-H	Strong-H	Strong-H	Strong-H
28	SEM IV	0606210403-PP	T6965	Actuarial Statistics	CO1	To understand the concept of Insurance	Strong-H	Strong-H	Moderate-M	Strong-H

						CO2	To know the concept and characteristics of stochastic processes	Strong-H	Strong-H	Strong-H	Strong-H
						CO3	To apply and communicate the results for better strategy making	Strong-H	Strong-H	Strong-H	Strong-H
						CO4	To be able to analyse actuarial models involving stochastic processes	Strong-H	Strong-H	Strong-H	Moderate-M
						CO5	To evaluate the Overview of Distribution Of Future Lifetime.	Strong-H	Strong-H	Strong-H	Strong-H
						C06	To build the lifetime distribution function using the Kaplan-Meier and Nelson-Aalen models.	Strong-H	Strong-H	Strong-H	Strong-H
29	SEM IV	0606210404-PP	T6007	Business Communication	CO1	To identify what communication within organizations signifies, and examine why communication is necessary for managers	Strong-H	Strong-H	Moderate-M	Strong-H
						CO2	To use effective communication	Strong-H	Strong-H	Strong-H	Strong-H
						CO3	To apply different kinds of communication skills required for achievement of organizational goals.	Strong-H	Strong-H	Strong-H	Strong-H
						CO4	To analyse and appraise the nature and importance of communication within organizations.	Strong-H	Strong-H	Strong-H	Moderate- M
						CO5	To evaluate the various kinds of communication necessary for an organization	Strong-H	Strong-H	Strong-H	Strong-H
						C06	To develop the various media and styles used for different purposes	Strong-H	Strong-H	Strong-H	Strong-H
30	SEM IV	0606210405-PP	T6976	Introduction to R	CO1	To remember basic concepts such as data types, data structures and indexing, and use them in your work.	Strong-H	Strong-H	Moderate-M	Strong-H
						CO2	Understanding and manipulating data structures. Vector indexing, factors, Data management with strings, display and formatting.	Strong-H	Strong-H	Strong-H	Strong-H
						CO3	To apply basic functions for manipulating data	Strong-H	Strong-H	Strong-H	Strong-H
						CO4	To analyse basic exploratory data analysis with summary statistics and plots	Strong-H	Strong-H	Strong-H	Moderate-M
						CO5	To evaluate different R Programs using various commands for solving real life problems.	Strong-H	Strong-H	Strong-H	Strong-H
						C06	To create your own customized functions	Strong-H	Strong-H	Strong-H	Strong-H
31	SEM IV	0606210406-PP	T6974	Global Citizenship: World is one family	CO1	To explain students the importance of being our responsible citizen.	Strong-H	Strong-H	Moderate-M	Strong-H
						CO2	To understand the significance of citizen responsibility at community, national and world levels also the concept of vasudhaiva kutumbakam	Strong-H	Strong-H	Strong-H	Strong-H
						CO3	To apply the concept of Tolerance, Respect, Dialogue, Dissent, Coexistence, and Compassion	Strong-H	Strong-H	Strong-H	Strong-H
						CO4	To connect with the concept of global justice for a sustainable society	Strong-H	Strong-H	Strong-H	Moderate-M

					CO5	To nurture students into sensitive, ethical and critically conscious citizens who will contribute responsibly to our shared global community.	Strong-H	Strong-H	Strong-H	Strong-H
					C06	To develop the attitude of respect for differences and diversity.	Strong-H	Strong-H	Strong-H	Strong-H
32	SEM IV	0606210407-PP	T8000	Service Learning	CO1	Students can recall key concepts from the course material that relate to the service experience.	Strong-H	Strong-H	Moderate-M	Strong-H
					CO2	Students explain the relevance of course content in relation to the service experience and its broader social impact.	Strong-H	Strong-H	Strong-H	Strong-H
					CO3	Students use academic knowledge to address real-world problems in their service projects.	Strong-H	Strong-H	Strong-H	Strong-H
					CO4	Students break down complex social issues into components and analyze how different factors contribute to the problem.	Strong-H	Strong-H	Strong-H	Moderate-M
					CO5	Students assess the effectiveness of their service learning experience and its impact on the community, using evidence and critical thinking.	Strong-H	Strong-H	Strong-H	Strong-H
					C06	Students design innovative solutions to address community issues or propose new service learning initiatives that combine academic and civic knowledge.	Strong-H	Strong-H	Strong-H	Strong-H