



MAHATMA GANDHI UNIVERSITY, KERALA

Abstract

Bachelor of Science (Honours) Statistics - Modifications to the Course Outcomes and Course Content - Approved - Orders Issued.

ACA 16

No. 178/ACA 16/2025/MGU

Priyadarsini Hills, Dated: 07.01.2025

Read:- 1. U.O. No. 5797/ACA16/2024/MGU, dated. 27.06.2024

2. Minutes of the meeting of the Expert Committee in Statistics (UG), held on 04.12.2024

3. Orders of the Vice Chancellor under Section 10(17), Chapter III of the Mahatma Gandhi University Act 1985, dated. 06.01.2025.

ORDER

The syllabi of various Honours Under Graduate Programmes coming under The MGU-UGP (Honours) Regulations, 2024, have been approved vide paper read as (1) above and published on the website of the University.

The Expert Committee in Statistics (UG), discussed the need to modify the Course Outcomes (CO) and Course Content of the course, **MG2DSCSTA100: Introduction to Statistical Modelling**, Course Content of the courses, **MG2MDCSTA100: Time Series Method and their Applications**, and **MG2MDCSTA101: Data Analysis using JAMOVI and Introduction to R**, in the **Second Semester** of the Bachelor of Science (Honours) Statistics programme and has submitted recommendations vide paper read as (2) above.

(Recommendations are attached as annexure.)

Considering the emergency, sanction has been accorded by the Vice Chancellor, in exercise of the powers of the Academic Council vested upon him under Section 10(17), Chapter III of the Mahatma Gandhi University Act 1985, vide paper read as (3), to approve the above recommendations.

Hence, the Course Outcomes and the Course Content of the said courses in the second semester syllabus of the Bachelor of Science (Honours) Statistics programme programme, stands modified to this extent.

Orders are issued accordingly.

SHAJI K G

ASSISTANT REGISTRAR III
(ACADEMIC)
For REGISTRAR

Copy To

1. PS to VC
2. PA to Registrar/CE
3. Convenor, Expert Committee, Statistics (UG)
4. JR 2 (Admin)/ DR 2, AR 3 (Academic)
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Section Officer

Annexure

Semester 2

Course Name : Introduction to Statistical Modelling

Course Code : MG2DSCSTA100

COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome (Modified)	Learning Domains (Modified)	PO No. (Modified)	Page Number
2	Evaluate Mathematical Expectation	E	1	32
3	Analyse various probability distributions	No Change	1	
4	Evaluate fitting procedures of probability distributions and numerical problems	E	1	33

COURSE CONTENT

Content for Classroom Transaction (Units)

Module	Course Description (Modified)	Hours (Modified)	CO No. (Modified)	Page Number
1	No Change	10		33
1.1	No Change	3	No Change	
1.2	Demonstrate Probability mass function and its properties, probability density function (concept only), distribution function of a random variable: definition and properties.	4	No Change	
1.3	Demonstrate functions of random variable, transformations of random variable (univariate one to one functions only)	3	No Change	
1.4	Removed			
1.5	Removed			
2.1	Demonstrate mathematical expectation, its properties and simple problems (univariate only).	7	2	

2.2	Describe AM, GM, HM, Mean Deviation and Variance in terms of expectation and evaluate simple problems on AM and variance.	No Change	2	34
2.3	Describe generating functions: moment generating function, characteristic function and their properties.	3	2	
3	No Change	20		
3.1	Describe uniform distribution and Bernoulli distribution, explain binomial distribution and its properties (without proof), simple problems.	6	3	
3.2	Explain Poisson distribution and its properties (without proof), simple problems. Explain geometric distribution, mean and variance (without proof)	6	3	
3.3	Explain continuous uniform distribution, its mean and variance. Explain exponential distribution, mean and variance (without proof).	No Change	3	
3.4	Explain normal distribution, its properties. Discuss standard normal distribution and use of standard normal tables, problems	6	3	
3.5	Removed			
4.1	Computation of Binomial, Poisson and Normal probabilities	10	No Change	
4.2	Fitting of Binomial, Poisson and Normal distributions.	10	4	
4.3	Random number generation from Uniform, Binomial, Poisson and Normal distributions.	10	4	

Course Name : Time Series Methods and Their Applications

Course Code : MG2MDCSTA100

COURSE CONTENT

Content for Classroom Transaction (Units)

Module	Course Description (Modified)	Hours (Modified)	CO No. (Modified)	Page Number
3	No Change	No Change	4	38

Course Name : Data Analysis Using JAMOVI and Introduction to R

Course Code : MG2MDCSTA101

COURSE CONTENT

Content for Classroom Transaction (Units)

Module	Course Description (Modified)	Hours (Modified)	CO No. (Modified)	Page Number
1	Correlation and Regression Analysis	10		42
1.1	No Change	2	2	
1.5	Removed			
3.1	No Change	No Change	1	43
3.2	No Change	No Change	2	
3.3	No Change	No Change	1	
3.4	No Change	No Change	2	
3.5	No Change	No Change	3	
3.6	No Change	No Change	3	
3.7	t-test (one sample, paired sample t-test, independent sample t – test) - interpreting results	2	3	
3.8	One way and two way ANOVA	No Change	3	
3.10	No Change	No Change	3	44
3.11	No Change	No Change	3	