MODULE HANDBOOK

< Teori Peluang Probability Theory >

Nama Mata Kuliah	Teori Peluang Probability Theory
Prodi	Sarjana
Kode Mata Kuliah	SM234404
Semester	4
Penanggung Jawab	Amirul Hakam, S.Si., M.Si.
Dosen Pengampu	Dra. Laksmi Prita Wardani, M.Si. Dr. mont. Kistosil Fahim, M.Si Amirul Hakam, S.Si., M.Si. Sena Safarina, S.Si., M.Sc., D.Sc.
Bahasa	Bahasa Indonesia
Metode Pembelajaran	Metode SCL
Beban kerja	1. Tatap Muka: 3 x 50 = 150 menit per minggu 2. Pembelajaran terstruktur : 3 x 60 = 180 menit per minggu 3. Pembelajaran mandiri: 3 x 60 = 180 menit per minggu.
Bobot SKS	3 sks
Syarat mengikuti Ujian	Seorang mahasiswa harus menghadiri setidaknya 80% perkuliahan untuk dapat mengikuti ujian.
Mata Kuliah Prasyarat	Metode Statistika Kalkulus Peubah Banyak
Capaian Pembelajaran Mata Kuliah (CPMK)	

CPMK-1	Mahasiswa mampu menjelaskan dan memahami konsep dasar peluang dan variabel acak. *Students are able to explain and understand the basic concepts of probability and random variables.*
CPMK-2	Mahasiswa mampu menjelaskan dan menganalisis distribusi variabel acak dan jenis-jenisnya. *Students are able to explain and analyze the distribution of random variables and their types.*
CPMK-3	Mahasiswa mampu memahami dan menganalisis variabel acak bersama dan sifat-sifatnya. *Students are able to understand and analyze random variables together and their properties.*
CPMK-4	Mahasiswa mampu menjelaskan dan memahami fungsi variabel acak.

		Students are able to explain and understand the function of random variables.
Deskripsi Singkat Mata Kuliah	Pada kuliah ini akan dijelaskan mengenai definisi, konsep dasar, sifat-sifat peluang dan teknik penghitungan. Selanjutnya dibahas mengenai peubah acak, fungsi distribusi, fungsi peubah acak dan distribusi terbatas. Dasar-dasar teori peluang tersebut digunakan untuk merepresentasikan dan menginterpretasikan populasi dasar dan model matematika probabilistik. *This lecture will explain the definition, basic concepts, properties of opportunities and calculation techniques. Next discussed* *regarding random variables, distribution functions, random variable functions and limited distribution. The basics of opportunity theory are used to represent and interpret basic populations and probabilistic mathematical models.*	
Bahan Kajian: Materi Pembelajaran	• Aljabar Sigma dan Peluang/Sigma Algebra and Probability • Variabel acak dan distribusinya/Random variables and its distributions • Distribusi khusus diskrit dan kontinu/Special Discrete and Continuous Distributions • Distribusi bersama/Joint Distribution • Sifat-sifat variabel acak/Properties of random variables • Fungsi variabel acak/Function of Random Variables • *Sigma Algebra and Probability/Sigma Algebra and Probability* • *Random variables and their distributions* • *Special discrete and continuous distributions* • *Joint distribution* • *Properties of random variables* • *Function of random variables*	
Bobot Penilaian	● Assignment (20%) ● Quiz (20%) ● Mid-term Examination (30%) ● Final Examination (30%)	
Media Pembelajaran	LCD, whiteboard, websites (myITS Classroom), zoom.	
Pustaka	Utama : 1. Bain, L.J., Engelhardt, M. 2000 , " Introduction to Probability and Mathematical statistics", Duxbury Press, 2nd. Pendukung: 1. Ross, SM, Introduction to Probability Models, Academic Pres, 2014.	