STATISTIKA DASAR

Departemen Teknik Industri
Fakultas Teknik
Universitas Indonesia
Semester Gasal 2020/2021

Statistika Dasar (Basic Statistics)

Dosen Pengampu

Dr. Arian Dhini
arian.dhini@ui.ac.id

Dr. Zulkarnain

Asisten Mata Kuliah:

(aslab Lab SQE)

Jadwal Perkuliahan:

Senin, 10.00 – 12.30 (Statind 02)

Senin, 16.00 – 18.30 (Statind 01)
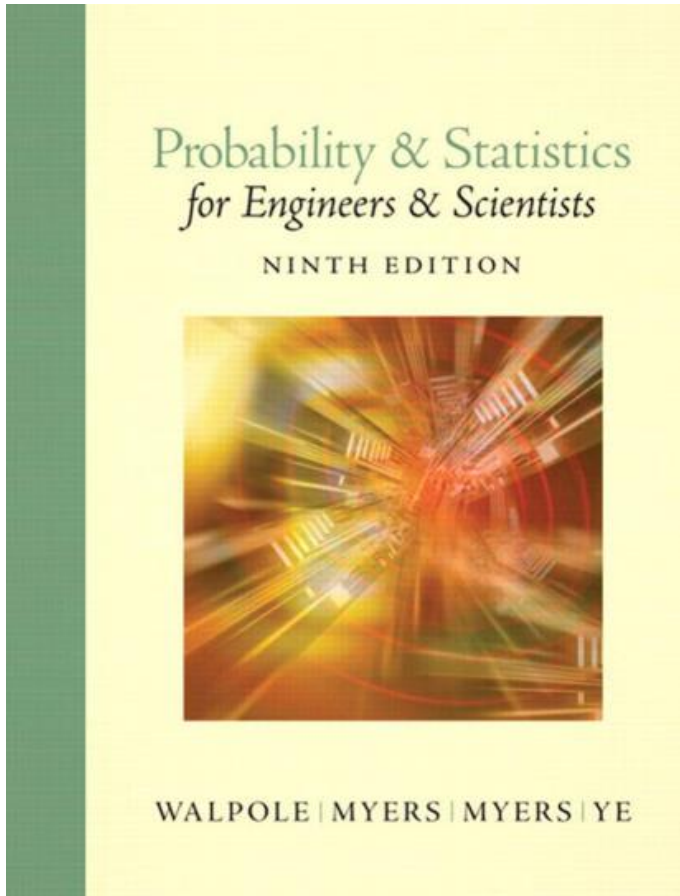
Selasa, 16.00 – 18.30 (KKI)

Ketua Kelas ??

Statind 02??

Statind 01??

KKI?

Referensi Utama

Probability & Statistics for Engineers & Scientist, 9th Edition

Walpole and Ronald E.

Pearson Prentice Hall: 2012.

Jadwal Perkuliahan

Pertemuan ke	Tanggal	Materi	Sub Materi
1	14/09/2019	Introduction in Statistics and Data Analysis	1.1 Overview : Statistics, Sample, and Population 1.2 Application of Statistics in Engineering 1.3 Computer in Statistics
2	21/09/2019	Descriptive Statistics	2.1. Measures of Location 2.2. Measures of Variability 2.1. Discrete and Continuous Data 2.2. Sampling Procedures; Collection of Data 2.3. Graphic Method and Descriptive Data
3	28/09/2019	Probability and Random Variables	3.1 Concept of Probability : Sample space and Events 3.2 Probability of an Event 3.3 Rules in Probability: additive, multiplication, conditional, Bayes' Rule 3.4 Concept of a Random Variable 3.5 Discrete Probability Distribution
4	5/10/2019	Probability and Random Variables	3.6 Continuous Probability Distribution 3.7 Probability Distribution with Parameters 3.8 Mean of a Random Variable 3.9 Variance of a Random Variable

Jadwal Perkuliahan

Pertemuan ke	Tanggal	Materi	Sub Materi
5	12/10/2019	Some Discrete Probability Distribution	5.1 Discrete Uniform Distribution 5.1.1 Binomial & Multinomial Distribution 5.1.2 Hypergeometric Distribution 5.1.3 Negative Binomial & Geometric Distribution 5.1.4 Poisson Distribution
6	19/10/2019	Some Continuous Probability Distribution	6.1 Continuous Uniform Distribution 6.1.1 Normal Distribution 6.1.2 Gamma & Exponential Distribution
7	26/10/2019	Some Continuous Probability Distribution	6.1.3 Lognormal Distribution 6.1.4 Weibull Distribution 6.1.5 Chi Square Distribution
8	**…**	**Mid Term Test**	**Problem Set**

Jadwal Perkuliahan

Pertemuan ke	Tanggal	Materi	Sub Materi
9	09/11/2019	Sampling Distribution	7.1 Basic concept of Sampling Distribution 7.2 Sampling Distribution of Means 7.3 Sampling Distribution of Variance
10	16/11/2019	Estimation	8.1 Inferential Statistics 8.2 Classic Method of Interval 8.3 One Population : Estimating the Mean 8.4 Two Population : Estimating the Difference between Two Means
11	23/11/2019	Estimation	8.5 One Population : Estimating the Variance 8.6 Two Population : Estimating the Ratio between Two Variances 8.7 Determining Sample Size
12	30/11/2019	Hypothesis testing	9.1. Statistical Hypothesis: A General Concept 9.2. Testing a Statistical Hypothesis 9.3. Testing One and Two Tails Hypothesis

Jadwal Perkuliahan

Pertemuan ke	Tanggal	Materi	Sub Materi
13	07/12/2019	Hypothesis testing	9.4. The Use of P-Value for Decision Making in Testing Hypothesis 9.5. Test on Means : One and Two Population
14	14/12/2019	Hypothesis testing	9.6. Test on Variances : One and Two Population 9.7. Chi square Test : Goodness of Fit and Test for Independence
15	21/12/2019	Simple Linear Regression	10.1. Introduction to Linear Regression 10.2. Simple Linier Regression 10.3. Inference Concerning the Regression Coefficient 10.4. Analysis of Variance Approach
16	**…**	**FINAL TERM TEST**	**Problem Set**

Komponen Penilaian

Keaktifan	5%
Tugas Individu (PR)	15%
Tugas Kelompok (Term Papers)	20%
UTS	30%
UAS	30%

Aturan Main Kelas Daring

- Selama perkuliahan, harap microphone diset "mute", kecuali jika akan bertanya atau menjawab pertanyaan, silakan "unmute" atau "raise hand"

- Video selalu dinyalakan di awal perkuliahan, kecuali saat materi disampaikan, video bisa dimatikan, dan dinyalakan lagi ketika anda bertanya/menjawab, dan wajib dinyalakan kembali di akhir perkuliahan.

- Tidak ada record mengenai kehadiran, tetapi kehadiran anda saat kuliah, sangat membantu dalam menyelesaikan tugas-tugas perkuliahan.

Aturan Main Kelas Daring

- Harap selalu mengumpulkan tugas tepat waktu, setiap keterlambatan, akan berdampak pada pengurangan nilai

- Plagiarisme dalam tugas yang dikumpulkan, akan berdampak pengurangan nilai yang signifikan.

- Semua pengumuman selama perkuliahan, disampaikan melalui emas, dibantu oleh ketua kelas

- Agar suasana kelas lebih hidup, mhs sangat diharapkan membaca materi sebelum kuliah berlangsung

Apa yang harus dilakukan segera:

- Pemilihan Ketua Kelas
- Pembagian kelompok
- Buku referensi
- R software & R Studio

Thank You

"We trust in GOD, all others must bring data"