



# Satuan Acara Pengajaran

MAT30241 - Model Linier I (A/S)

Pengajar

*Dra. Saskya Mary Soemartojo M.Si.*

## Minggu 1

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**Materi**

- \* Review teori-teori pendukung
- \* Pendahuluan analisa regresi
- Respon Model
- Pengertian regresi analisis
- Aplikasi regresi
- Pengambilan data dalam regresi

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**Media** OHP, whiteboard

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**Referensi**

- \* A Second Course in Statistics Regression Analysis (5th ed), by W. Medenhall & T.Sincich  
Chapter 1
- \* Introduction to Linear Regression Analysis (3th-ed), by D.C Montgomery at all chapter 1

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**Aktivitas** Tutorial , diskusi Kelompok & presentasi hasil diskusi

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## Minggu 2

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**Materi**

- \* Regresi Linier Sederhana
- Pendahuluan
- Garis Probabilistic Model
- Fitting Model ( Metoda Taksiran Least Squares & Maksimum Likelihood Estimasi )

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**Media** OHP , Whiteboard

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**Referensi** \* A Second Course in Statistics: Regression Analysis (5th), by W. Medenhall & T.Sincich.  
Chapter 3.1 - 3.3  
\* Introduction to Linear Regression Analysis (3th-ed), by D.C Montgomery at all  
Chapter 2.1 2.2

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**Aktivitas** Tutorial , Diskusi kelompok & presentasi hasil diskusi

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### Minggu 3

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**Materi** Regresi Linier Sederhana  
- Asumsi Model  
- Estimator dari variansi

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**Media** OHP, Whiteboard

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**Referensi** \* A Second Course in Statistics: Regression Analysis (5th), by W. Medenhall & T.Sincich.  
Chapter 3.4 - 3.5  
\*Introduction to Linear Regression Analysis (3th-ed), by D.C Montgomery at all  
Chapter 2.3 - 2.6

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**Aktivitas** Diskusi Kelompok & Presentasi hasil diskusi

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### Minggu 4

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**Materi** \* Regresi Linier Sederhana  
- Kegunaan Model : Inferensi terhadap Slope  
- Koefisien Korelasi  
- Koefisien Determinasi

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**Media** OHP, Whiteboard

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**Referensi** \* A Second Course in Statistics: Regression Analysis (5th), by W. Medenhall & T.Sincich.  
Chapter 3.6 - 3.8  
\* Introduction to Linear Regression Analysis (3th-ed), by D.C Montgomery at all  
Chapter 2.3 - 2.6

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**Aktivitas** Diskusi kelompok , presentasi hasil diskusi

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### Minggu 5

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**Materi** Regresi Linier Sederhana  
- Menggunakan estimasi model untuk prediksi  
- Contoh menggunakan komputer  
- Estimasi regresi melalui Pusat (0,0)  
- Langkah-langkah untuk analisa regresi linier sederhana

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**Media** OHP , Whiteboard

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**Referensi** \* Introduction to Linear Regression Analysis (3th-ed), by D.C Montgomery at all Chapter 2.7 - 2.8  
\* Second course in Statistics : Regression Analysis (5th ed), by W. Mendenhall & T. Sincich , chapter 3.9 - 3.12

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**Aktivitas** Praktikum & Presentasi kelompok

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## Minggu 6

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**Materi** - Regresi Linier Sederhana dalam bentuk matriks  
- Metoda Uji residual  
- Metoda deteksi observasi outlier pada regresi linier sederhana

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**Media** OHP, Whiteboard, LCD, Komputer

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**Referensi** \* A Second Course in Statistics: Regression Analysis (5th), by W. Medenhall & T.Sincich.  
Chapter 4  
\* Introduction to Linear Regression Analysis (3th-ed), by D.C Montgomery at all Chapter 3.1-3.2

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**Aktivitas** Praktikum & Presentasi kelompok

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## Minggu 7

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**Materi** - Review Regresi Linier Sederhana  
- Membahas soal soal regresi linier sederhana  
- UTS

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**Media** OHP , Whiteboard

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**Referensi** \* A Second Course in Statistics: Regression Analysis (5th), by W. Medenhall & T.Sincich.  
Chapter 3.6 - 3.8  
\* Introduction to Linear Regression Analysis (3th-ed), by D.C Montgomery at all Chapter 2.3 - 2.6

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## Aktivitas

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### Minggu 8

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<b>Materi</b>	Regresi Linier Berganda - Bentuk Umum dan asumsi model - Bentuk Umum dan asumsi model dinyatakan dalam bentuk matriks
<b>Media</b>	OHP , Whiteboard, komputer & LCD
<b>Referensi</b>	* A Second Course in Statistics: Regression Analysis (5th), by W. Medenhall & T.Sincich. Chapter 4.5-4.7 * Introduction to Linear Regression Analysis (3th-ed), by D.C Montgomery at all Chapter 3.3.1-3.3.2

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## Aktivitas

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### Minggu 9

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<b>Materi</b>	Regresi Linier Berganda - Penaksiran Parameter (metoda Least Squares & metoda Maksimum Likelihood) - Estimator variansi populasi - Inferensi koefisien parameter - Koefisien Determinasi pada regresi berganda
<b>Media</b>	OHP, Whiteboard, komputer
<b>Referensi</b>	IDEM
<b>Aktivitas</b>	Presentasi , praktikum

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### Minggu 10

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<b>Materi</b>	IV. Regresi Linier Berganda 4.5 Inferensi parameter koefisien regresi 4.6 Penaksiran observasi 4.7 Koefisien regresi terstandar 4.8 Koefisien determinasi & Multikolinieri
<b>Media</b>	IDEM
<b>Referensi</b>	IDEM

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**Aktivitas**      IDEM

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## Minggu 11

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**Materi**            - Uji Utility Model : Anava F Test  
                      - Memilih model terbaik  
                      - Uji untuk individual koefisien regresi

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**Media**            IDEM

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**Referensi**        IDEM

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**Aktivitas**        IDEM

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## Minggu 12

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**Materi**            - Uji untuk membandingkan 2 model tersarang  
                      - Stepwise & Backward  
                      - Teknik pemilihan variabel

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**Media**            IDEM

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**Referensi**        IDEM

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**Aktivitas**        IDEM

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## Minggu 13

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**Materi**            Regresi Linier Berganda  
                      - Analisa Residual  
                      - Diagnosa untuk leverage & Data Influensial

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**Media**            IDEM

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**Referensi**        IDEM

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**Aktivitas**        Praktikum & Presentasi Diskusi Kelompok

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## Minggu 14

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**Materi**            - Model Regresi dengan Variabel Indikator  
                      - Membahas soal soal tugas-tugas berkaitan regresi linier berganda

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**Media**      IDEM

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**Referensi**      IDEM

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**Aktivitas**      Presentasi kelompok & tutorial

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Minggu 15

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**Materi**      UAS

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**Media**

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**Referensi**

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**Aktivitas**      UJIAN

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