

TMA4267 Linear statistical models

Spring 2026

Thea Bjørnland

TMA4267 Linear statistical models

About the course

Credits

7.5

Course start

Spring 2026

Language of instruction

English

Examination arrangement

School exam

Level

Third-year courses, level III

Duration

1 semester

Location

Trondheim

[About](#)[Timetable](#)[Examination](#)

About the course

Course content

Random vectors. Multivariate normal distribution. Multiple linear regression. Analysis of variance. Multiple hypothesis testing. Design of experiments.

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Plan and requirements for spring 2026

We split the course into 1+**3 parts**

Part 0: Introduction and repetition

Part 1: Random vectors, multivariate normal distribution and distributions of linear and quadratic forms

Part 2: Multiple linear regression and ANOVA

Part 3: Applications / design of experiments

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Plan and requirements for spring 2026

We split the course into 1+**3 parts**

Part 0: Introduction and repetition

Part 1: Random vectors, multivariate normal distribution and distributions of linear and quadratic forms

1 of 3 assignments required
theory / calculations

Part 2: Multiple linear regression and ANOVA

1 of 3 assignments required
data analysis

Part 3: Applications / design of experiments

1 mandatory
assignment

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Plan and requirements for spring 2026

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Part 0: Introduction and repetition Today

Part 1: Random vectors, multivariate normal distribution and
distributions of linear and quadratic forms

(?) 13. jan - 5. feb

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Plan and requirements for spring 2026

We split the course into 1+**3 parts**

Part 0: Introduction and repetition Today

Part 1: Random vectors, multivariate normal distribution and distributions of linear and quadratic forms

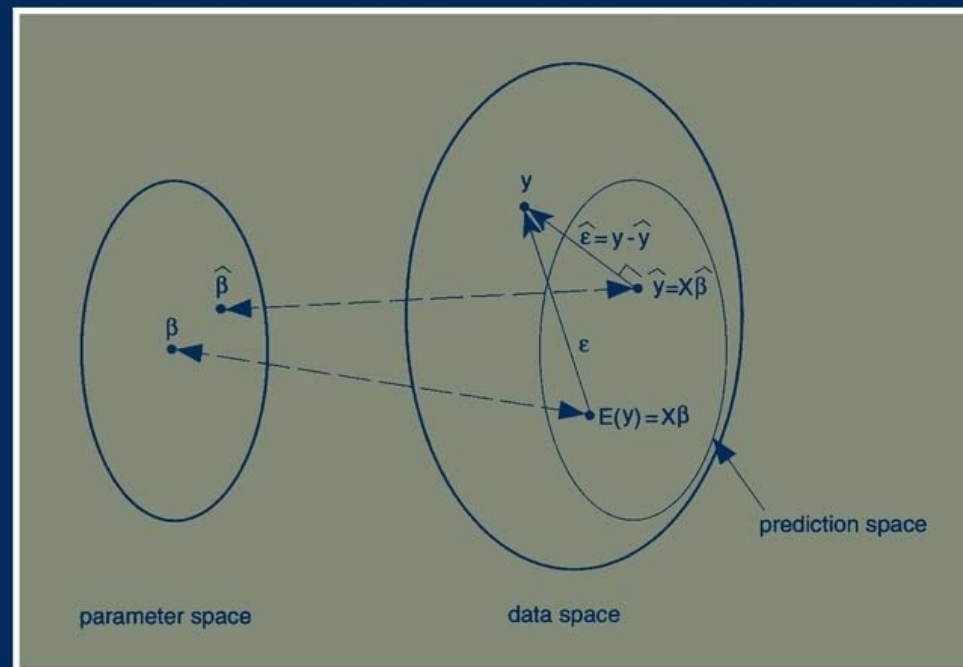
(?) 13. jan - 5. feb

Note: Three lectures in part 1 will be 'interactive lectures'

- We select a short section of the book that you read beforehand
- In class: work on exercises, some plenary discussion
- Exercises are the same as in assignments (1 / 3 required)

Linear Models in Statistics

Second Edition



ALVIN C. RENCHER • G. BRUCE SCHAAALJE

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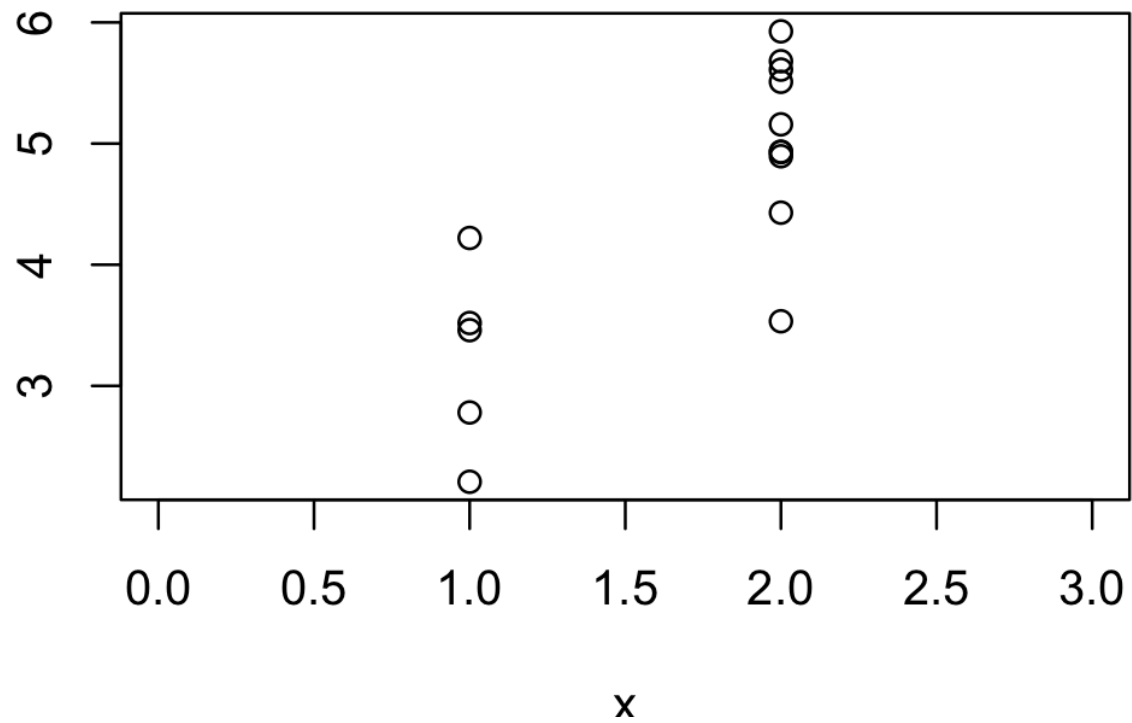
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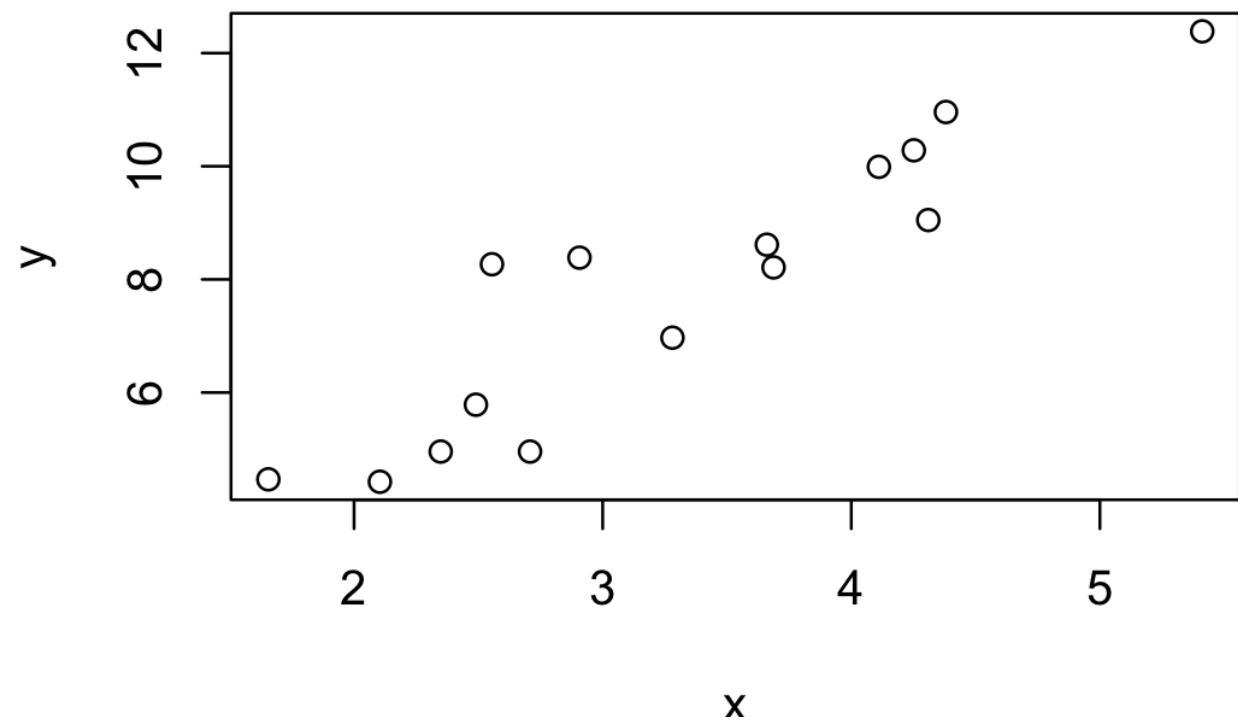
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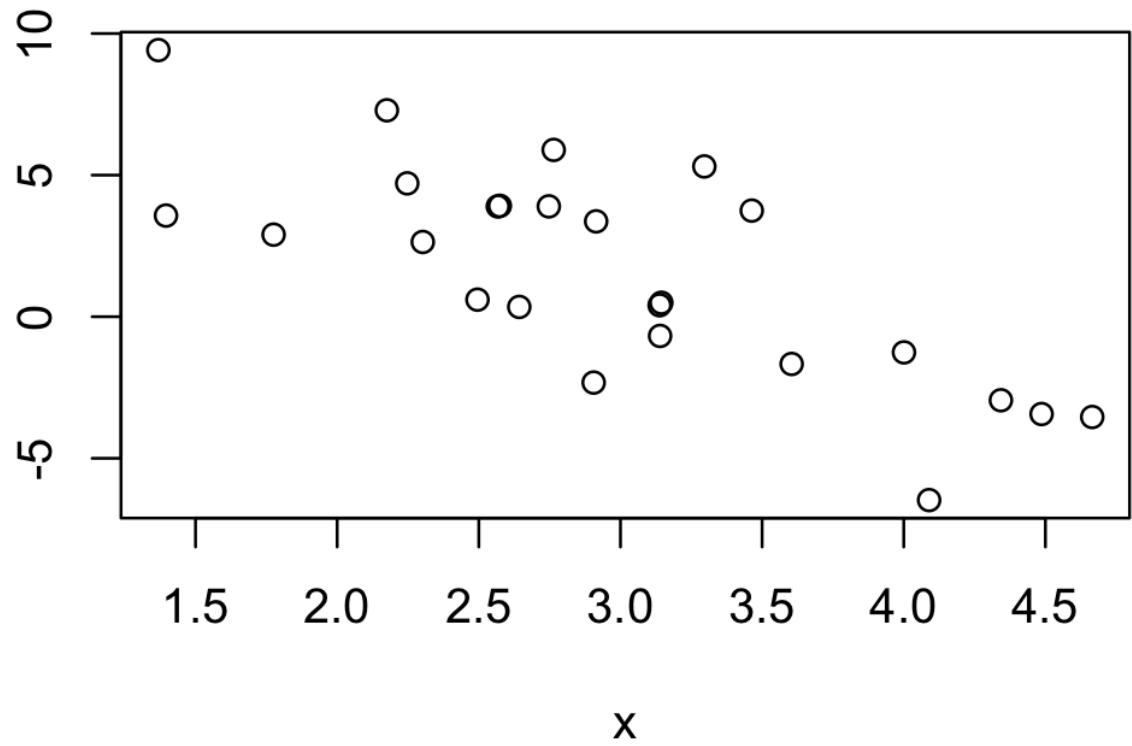
A



B



C



D

