

Preliminary Schedule for Multivariate Methods, 1MS003 (10 hp)

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Lecturer: Shaobo Jin, shaobo.jin@math.uu.se

Literature:

1. Johnson, R. A., and Wichern, D. W. (2014) *Applied Multivariate Statistical Analysis*, 6th Edition, NJ:Prentice Hall. (This book is accessible from the university library e-resources.)
2. Beamer slides available at Studium
3. R codes available at Studium

Examination: The examination consists of two parts:

- Assignments (2 hp): PASS or FAIL
 - Homeworks: Group work (no more than 3 members)
 - Mini Project (including presentation): Group work (no more than 3 members)
- Individual Final Exam (8 hp): The grading scale is

| < 18 | $[18, 24)$ | $[24, 32)$ | $[32, 40]$ |
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| Contents | Reading reference |
|---|-------------------|
| Block I: Basics | |
| L1 - L2: Introduction | Chapter 1, 2, 3 |
| L3 - L4: Multivariate Normal Distribution | Chapter 4 |
| HWA1 | |
| Block II: Regression and Inference | |
| L5 - L6: One Sample Inference | Chapter 5 |
| L7 - L8: Several Sample Inference | Chapter 6 |
| L9 - L10: Regression | Chapter 7 |
| HWA2 | |
| Block III: Latent variable modeling | |
| L11 - L12: Principal Component Analysis | Chapter 8 |
| L13 - L14: Factor Analysis | Chapter 9 |
| L15 - L16: Canonical Correlation Analysis | Chapter 10 |
| HWA3 | |
| Block IV: Clustering and classification | |
| L17 - L19: Discriminant Analysis and Classification | Chapter 11 |
| L20 - L22: Clustering | Chapter 12 |
| HWA4 | |
| L23 - L24: Mini Project Presentation | - |
| L25: Review | - |