

02441–J27 Applied Statistics and Statistical Software

4 – 22/1, 2027

Week I			Material at <i>DTU learn</i>
1 Mon	9:00 - 9:30	Course introduction	L0_CourseIntro_J27.pdf
	9:30 - 10:30	<i>Introduction to R</i> (Ch. ¹ Appendix/Ch. ² 1,3)	Rintro_J27.R
	11:00 -12:00	Hands-on exercises	RIntro_exercises_J27.pdf
	13:00 - 13:20	Discussion of hands-on exercises	
	13:30 - 14:30	<i>Tests of hypothesis</i> (Ch. ¹ 5, 6/Ch. ² 9)	L1_Tests_J27.pdf
	14:45 - 16:30	Hands-on exercises	L1_Tests_J27.R
2 Tues	9:00 - 9:20	Discussion of hands-on exercises	
	9:30 - 10:30	<i>Simple linear regression</i> (Ch. ¹ 7/Ch. ² 10)	L2_SimpleReg_J27.pdf
	10:45 - 12:00	Hands-on exercises	L2_SimpleReg_J27.R
	13:00 - 13:20	Discussion of hands-on exercises	
	13:30 - 14:30	<i>Multiple linear regression</i> (Ch. ¹ 10/Ch. ² 10)	L3_MultipleReg_J27.pdf
	14:45 - 16:30	Hands-on exercises	L3_MultipleReg_J27.R
3 Wed	9:00 - 9:20	Discussion of hands-on exercises	
	9:30 - 10:30	<i>One-way Analysis of Variance</i> (Ch. ¹ 8/Ch. ² 16)	L4_AnovaI_J27.pdf
	10:45 - 12:00	Hands-on exercises	L4_AnovaI_J27.R
	13:00 - 13:20	Discussion of hands-on exercises	
	13:30 - 14:30	<i>Two-way Analysis of Variance</i> (Ch. ¹ 8/Ch. ² 16)	L5_AnovaII_J27.pdf
	14:45 - 16:30	Hands-on exercises	L5_AnovaII_J27.R
4 Thurs	9:00 - 9:20	Discussion of hands-on exercises	
	9:30 - 10:30	<i>Analysis of covariance</i> (Ch. ¹ 9/Ch. ² 16)	L6_Ancova_J27.pdf
	10:45 - 12	Hands -on exercises	L6_Ancova_J27.R
	13 - 13:20	Discussion of hands-on exercises	
	13:30 - 14:30	<i>Categorical data analysis</i> (Ch. ¹ 14, 15/Ch. ² 11)	L7_LogisticReg_J27.pdf
	14:45 - 16:30	Hands-on exercises	L7_LogisticReg_J27.R
5 Fri	9:00 - 9:20	Discussion of hands-on exercises	
	9:30 - 10:30	<i>Linear Models I: model selection</i> (Ch. ¹ 10/Ch. ³ 6)	L8_ModelSelection_J27.pdf
	10:45 - 12	Hands-on exercises	L8_ModelSelection_J27.R
	13:00 - 13:20	Discussion of hands-on exercises	
	13:30 - 14:30	<i>Linear Models II: Lasso Reg</i> (Ch. ³ 6)	L9_LassoReg_J27.pdf
	14:45 - 16:00	Hands-on exercises	L9_LassoReg_J27.R
	16:00 - 16:30	Discussion of hands-on exercises	

¹*Statistics. An introduction using R* (2015) Second edition, MJ Crawley.

²*The R book* (2023) Third edition, Jones, P., Harden, S. & Crawley, M.J. <https://findit.dtu.dk/en/catalog/643dedb4354>

³*An Introduction to Statistical Learning with Applications in R/Python* (2023) Second edition, James J, Witten, D, Hastie, T, & Tibshirani, R. <https://www.statlearning.com>

⁴*An Introduction to R*. <https://cran.r-project.org/doc/manuals/r-release/R-intro.pdf>

Week II & III

Mon, 11 - Wed, 13	9:00-12:00, 13:00 -16:00	Working on Assignment 1 Supervision on Assignment 1.
Wed 13	16:00	Deadline for uploading the Assignment 1 Exam assignment becomes available.
Thu,14	9:00-12:00, 13:00-16:00	Working on the exam assignment. Feed back on the Assignment 1 (afternoon)
Fri, 14 to Tue the 19th	9:00-12:00, 13:00-16:00	Working on the exam assignment Supervision on the exam assignment.
Wed, 20	13:00-16:00 16:00	Working on the exam assignment Deadline for uploading the exam assignment
Thurs, 21	9:00-12:00, 13:00-16:00	Preparing the presentation for the exam
Fri, 22	9:00–	Exam: presentation of projects in groups, and individual oral exam (according to the timetable).
