Date	Class #	Course Topic	In Class Explained Topics	Autonomous Work
22-09-2025	1	Presentation and Revisions	Presentation. Program, Evaluation, Bibliography. Review of concepts of Parameter estimation: Random sample, Parameters, Statistics, Estimators and Estimates; Sample mean and variance vs. population mean and variance.	Reading Chapter 7, pages 288 to 293 of Newbold et al. (2022). Statistics for Business and Economics, 9th ed. Pearson Education Limited. Additional Exercises available in Moodle [confidence_intervals_exercises.pdf]
26-09-2025	2	Confidence Intervals I	Parameter estimation: estimation by intervals. Core variable method. Degree of confidence, margin of error and sample size. Illustrative exercise (CI for mean with known population variance).	Read Chapter 7, pages 295 to 300 and 319 to 323 by Newbold et al. (2022). Statistics for Business and Economics, 9th ed. Pearson Education Limited. Additional Exercises available in Moodle [confidence_intervals_exercises.pdf]
30-09-2025	3	Confidence Intervals II	Interval estimation for a normal population. - CI for a mean, with unknown variance; small or large sample. - CI for a variance.	Read Chapter 7, pages 301 to 306 and 310 to 313 by Newbold et al. (2022). Statistics for Business and Economics, 9th ed. Pearson Education Limited. Additional Exercises available in Moodle [confidence_intervals_exercises.pdf]
03-10-2025	4	Confidence Intervals III	Bernoulli population. - IC for a ratio - CI for the difference of two proportions.	Read Chapter 7, pages 307 to 309 and Chapter 8, pages 344 to 345 by Newbold et al. (2022). Statistics for Business and Economics, 9th ed. Pearson Education Limited. Additional Exercises available in Moodle [confidence_intervals_exercises.pdf]
07-10-2025	5	Confidence Intervals IV	CI for normal populations. - CI for the equality of two means, with known variances. - CI for the equality of two means, with the same or different unknown variances.	Read Chapter 8, pages 337 to 343 of Newbold et al. (2022). Statistics for Business and Economics, 9th ed. Pearson Education Limited. Additional Exercises available in Moodle [confidence_intervals_exercises.pdf]
10-10-2025	6	Confidence Intervals V	Solving exercises and interpreting SPSS outputs [ci_spss_outputs_exercises.pdf].	
14-10-2025	7	Parametric Hypothesis Testing I	Hypothesis tests. Introduction. Null and alternative hypotheses. Unilateral and bilateral tests. Steps in conducting a hypothesis test. Decision rules: regions of rejection/criticism and acceptance. Type I and type II errors; level of significance. Hypothesis testing to a mean, normal or non-normal population, known variance.	Read Chapter 9, pages 350 to 365 by Newbold et al. (2022). Statistics for Business and Economics, 9th ed. Pearson Education Limited. Additional Exercises available in Moodle [hypothesis_testing_exercises.pdf]
17-10-2025	8	Parametric Hypothesis Testing II	Hypothesis tests to a mean, normal or non-normal population, unknown variance. Decision rules based on p-value. Solving exercises and interpreting SPSS outputs [hypothesis_testing_spss_output_exercises_part_A.pdf].	Read Chapter 9, pages 366 to 368 of Newbold et al. (2022). Statistics for Business and Economics, 9th ed. Pearson Education Limited. Additional Exercises available in Moodle [hypothesis_testing_exercises.pdf]
21-10-2025	9	Parametric Hypothesis Testing III	Test for a variance. Test for a ratio.	Read Chapter 9, pages 370 to 371 and 379 to 381 by Newbold et al. (2022). Statistics for Business and Economics, 9th ed. Pearson Education Limited. Additional Exercises available in Moodle [hypothesis_testing_exercises.pdf]
24-10-2025	10	Parametric Hypothesis Testing IV	Errors and their probabilities in an hypothesis test. The power function of a test.	Read Chapter 9, pages 372 to 377 of Newbold et al. (2022). Statistics for Business and Economics, 9th ed. Pearson Education Limited. Additional Exercises available in Moodle [hypothesis_testing_exercises.pdf]
28-10-2025	11	Parametric Hypothesis Testing V	Solving exercises and interpreting SPSS outputs [hypothesis_testing_spss_output_exercises_part_A.pdf]	
31-10-2025	12	Parametric Hypothesis Testing VI	Revisions for the Intermediate test.	Exercises from previous evaluations available on Moodle
04-11-2025	13	Parametric Hypothesis Testing VII	Tests for equality of two means for independent samples. Assumptions. Test for the equality of two variances.[hypothesis_testing_spss_output_exercises_part_B.pdf].	Read Chapter 10, pages 389 to 390, 395 to 402 and 407 to 409 by Newbold et al. (2022). Statistics for Business and Economics, 9th ed. Pearson Education Limited. Additional Exercises available in Moodle [hypothesis_testing_exercises.pdf]
07-11-2025	14	Parametric Hypothesis Testing VIII	Test for the equality of two proportions. Tests for equality of two means for paired samples. Interpreting SPSS outputs [hypothesis_testing_spss_output_exercises_part_B.pdf].	Read Chapter 10, pages 391 to 394 and 403 to 406 by Newbold et al. (2022). Statistics for Business and Economics, 9th ed. Pearson Education Limited. Additional Exercises available in Moodle [hypothesis_testing_exercises.pdf]
11-11-2025	15	Parametric Hypothesis Testing IX	Simple analysis of variance (Oneway ANOVA). Hypotheses, conditions of application and assumptions. Interpreting SPSS outputs [hypothesis_testing_spss_output_exercises_part_B.pdf].	Read Chapter 15, pages 649 to 657 of Newbold et al. (2022). Statistics for Business and Economics, 9th ed. Pearson Education Limited. Additional Exercises available in Moodle [hypothesis_testing_exercises.pdf]
14-11-2025	16	Parametric Hypothesis Testing X	Validation of the assumptions of simple analysis of variance (Oneway ANOVA): - equality of variances of two or more populations (Levene test); - normality of each population group (Kolgomorov-Smirnov and Shapiro-Wilk tests). Multiple comparison tests: for the same or different unknown variances.Interpreting SPSS outputs [hypothesis_testing_spss_output_exercises_part_B.pdf].	Read Chapter 15, pages 658 to 660 of Newbold et al. (2022). Statistics for Business and Economics, 9th ed. Pearson Education Limited. Additional Exercises available in Moodle [hypothesis_testing_exercises.pdf]
18-11-2025	17	Non-Parametric Hypothesis Testing I	Fit Tests: - Chi-square adjustment test. Test for equality of two distributions with independent samples (Mann-Whitney). Test for equality of more than two distributions with independent samples (Kruskal-Wallis). Interpreting SPSS outputs [hypothesis_testing_spss_output_exercises_part_B.pdf].	Read Chapter 14, pages 606 to 617 of Newbold et al. (2022). Statistics for Business and Economics, 9th ed. Pearson Education Limited. Read pages 379 to 381 of Bernstein, S. and Bernstein, R. (1999) Theory and Problems of Elements of Statistics II. Additional Exercises available in Moodle [hypothesis_testing_exercises.pdf]
21-11-2025	18	Non-Parametric Hypothesis Testing II	Fit Tests: - Kolmogorov-Smirnov and Shapiro-Wilk tests for normal-fitting. Contingency tables. - Chi-square independence test. Interpreting SPSS outputs [hypothesis_testing_spss_output_exercises_part_B.pdf]	Read Chapter 14, pages 618 to 622 of Newbold et al. (2022). Statistics for Business and Economics, 9th ed. Pearson Education Limited. Read pages 381 to 383 of Bernstein, S. and Bernstein, R. (1999) Theory and Problems of Elements of Statistics II. Additional Exercises available in Moodle [hypothesis_testing_exercises.pdf]
25-11-2025	19	Correlation and Regression I	Correlation versus causation. Simple linear regression: model. Parameter estimation: least squares method. Explanatory power and validation of the model: coefficient of determination, hypothesis tests to the model coefficients and ANOVA. Interpretation of SPSS outputs [regression_spss_outputs_exercises.pdf].	Read Chapter 11, pages 456 to 458 and 421 to 449, by Newbold et al. (2022). Statistics for Business and Economics, 9th ed. Pearson Education Limited. Additional Exercises available in Moodle [regression_exercises.pdf]
28-11-2025	20	Correlation and Regression II	Linear Regression: Assumptions. Interpretation of SPSS outputs [regression_spss_outputs_exercises.pdf].	Read Chapter 11, pages 456 to 458 and 421 to 449, by Newbold et al. (2022). Statistics for Business and Economics, 9th ed. Pearson Education Limited. Additional Exercises available in Moodle [regression_exercises.pdf]
02-12-2025	21	Correlation and Regression III	Multiple linear regression: model, assumptions. Model validation. Adjusted coefficient of determination. Interpretation of SPSS outputs [regression_spss_outputs_exercises.pdf].	Read Chapter 12, pages 478 to 513 and Chapter 13, pages 578 to 590 by Newbold et al. (2022). Statistics for Business and Economics, 9th ed. Pearson Education Limited. Additional Exercises available in Moodle [regression_exercises.pdf]
05-12-2025	22	Revisions I	Revisions for the Final Test.	Exercises from previous evaluations available on Moodle
09-12-2025	23	Revisions II	Revisions for the Final Test.	Exercises from previous evaluations available on Moodle
12-12-2025	24	Revisions III	Revisions for the Final Test.	Exercises from previous evaluations available on Moodle