



University of Minho
School of Medicine

BIostatISTICS IN HEALTH SCIENCES

January 24th to February 11th, 2022 ::: 12th Edition

Week 1

| Day | Start | End | Theme |
|------------|-------|-------|--|
| 24-01-2022 | 14:00 | 15:30 | Course presentation / The role of Biostatistics in Health Sciences / Basic notions |
| | 16:00 | 17:30 | Introduction to IBM SPSS Statistics (questionnaire database) |
| 25-01-2022 | 14:00 | 15:30 | Sampling procedures / Descriptive Statistics |
| | 16:00 | 17:30 | Probability Theory / Normal Distribution / Central Limit Theorem |
| 26-01-2022 | 14:00 | 15:30 | Estimation theory / Punctual and interval estimation |
| | 16:00 | 17:30 | Statistical hypothesis test / t-tests / One Sample t test |
| 27-01-2022 | 9:00 | 10:30 | t-tests / Two independent samples / Paired samples |
| | 11:00 | 12:30 | t tests / Practical exercises / Effect size / Writing results |
| | 14:00 | 15:30 | Analysis of Variance / One-way |
| | 16:00 | 17:30 | Analysis of Variance / Repeated Measures |
| 28-01-2022 | 9:00 | 10:30 | Analysis of Variance / Mixed Design |
| | 11:00 | 12:30 | Analysis of Variance / Practical exercises / Effect size Writing results |
| | 14:00 | 15:30 | Analysis of Variance / Overall review First week balance |

Week 2

| Day | Start | End | Theme |
|------------|-------|-------|---|
| 01-02-2022 | 11:00 | 12:30 | Revisions & Exercises |
| | 14:00 | 17:30 | Pearson Correlation Coefficient and Simple Linear Regression / Multiple Linear Regression |
| 02-02-2022 | 9:00 | 12:30 | Binary and Multinomial Logistic Regression |
| | 14:00 | 15:30 | Roc curves |

Week 2 (cont.)

| Day | Start | End | Theme |
|------------|-------|-------|--|
| 03-02-2022 | 9:00 | 10:30 | Nonparametric statistics / Mann-Whitney / Wilcoxon |
| | 11:00 | 12:30 | Nonparametric statistics / Kruskal-Wallis / Friedman |
| | 14:00 | 15:30 | Nonparametric statistics / Chi-Square (crosstabs) |
| | 16:00 | 17:30 | Nonparametric statistics / Pearson's Phi Cramer's V / Spearman's rho / Kendall's tau |
| 04-02-2022 | 14:00 | 15:30 | Nonparametric statistics / Overview |
| | 16:00 | 17:30 | Course Balance |

Week 3

| Day | Start | End | Theme |
|------------|-------|-------|-----------------------------------|
| 09-02-2022 | 9:00 | 12:30 | Clarification and support session |
| 10-02-2022 | 9:00 | 12:30 | Clarification and support session |
| 11-02-2022 | 9:00 | 12:30 | Exam |

THIS IS AN IN-PERSON COURSE

All rules and guidelines from DGS and University of Minho for COVID-19 prevention will be strictly followed