

**Biostatistics curriculum**  
Autumn semester, 2023/24

Week	Date	Number	Title	Lecturer	English seminar		
					Title	Teacher 1	Teacher 2
1	6, Sept (Dent) 8, Sept (Med)	1	Introduction, math introduction	VZ			
2	11, Sept (Med) 11, Sept (Dent)	2	Conditional probability and its clinical implications. Marginalization. Bayes's theorem. Independent events.	SZJ	Conditional probability and its clinical implications. Marginalization. Bayes's theorem. Independent events.	DBA	BZS
	13, Sept (Dent) 15, Sept (Med)	3	Descriptive statistics (measure of central tendency and spread; percentile, quartile). Histograms, box and whisker plot.	JA			
3	20, Sept (Dent) 22, Sept (Med)	4	Characterization of discrete distributions (probability distribution, cumulative distribution function). Binomial and Poisson distribution.	VáGy	Descriptive statistics. Histograms, box and whisker plot.	PF	GK
4	27, Sept (Dent) 29, Sept (Med)	5	Continuous random variables. Probability density function. Normal distribution, standard normal distribution.	PGy	Discrete distributions (probability distribution and distribution function). Binomial and Poisson distributions.	JA	VáGy
5	4, Oct (Dent) 6, Oct (Med)	6	Sampling, representative sample, unbiased estimation. Central limit theorem. Standard error of the mean. Introduction to hypothesis testing.	VGy	Normal distribution, standard normal distribution	FZs	SZJ
6	11, Oct (Dent) 13, Oct (Med)	7	Hypothesis testing, type I and type II errors, one- and two tailed tests. p value. z test, one sample t-test.	ML	Sampling, representative sample, unbiased estimation. Central limit theorem. Standard error of the mean.	HP	ML
7	18, Oct (Dent) 20, Oct (Med)	8	Statistical tests: paired and unpaired t-test, F test.	VZ	Hypothesis testing, Level of significance, type I and type II errors, one- and two tailed tests. p value. z-test, one sample t-test.	VZ	VGy
8	25, Oct (Dent) 27, Oct (Med)	9	Clinical implications of conditional probability (sensitivity, specificity, positive and negative predictive values). ROC curve. Analysis of discrete random variables. Chi-squared test. Epidemiologic investigations: relative risk, odds ratio. Kaplan-Meier curve.	NP	Statistical tests: paired and unpaired t-test, F test.	PGy	VZ
9	1, Nov (Dent) 3, Nov (Med)	10	Summary	SZGT	Clinical implications of conditional probability (sensitivity, specificity, positive and negative predictive values). ROC curve. Analysis of discrete random variables. Chi-squared test. Epidemiologic investigations: relative risk, odds ratio; Kaplan-Meier curve	ML	NP
10	8, Nov (Dent) 10, Nov (Med)				Summary	NE	SZGT
11							
12			<b>Grade offering test</b>				

**Biostatistics lecture:**

**Med:**

week 2: Monday, 8:00-9:00 (LSB F.015-016)  
weeks 1-10: Friday, 11:00-12:00 (LSB F.015-016)

**Dent:**

week 2: Monday, 10:00-11:00 (LSB F.003-004)  
weeks 1-10: Wednesday, 15:00-16:00 (LSB F.003-004)