Detailed Course Syllabus

Academic year: 2025/2026	**Semester:** Winter semester
Study Program: Komunikologija (R) (elective) Povijest (R) (elective) Psihologija (R) (elective) Sociologija (R) (elective) Sestrinstvo (I) (elective) Sestrinstvo (R) (elective) Primaljstvo (R) (elective) Primaljstvo (I) (elective)	**Year of study:** 1

I. BASIC COURSE INFORMATION

Name: Introduction to Statistics	
Abbreviation: IZBP233	
ECTS: 6	**Code:** 252568
Prerequisites: No	
Total Course Workload	
Teaching Mode	**Total Hours**
Lecture	30
Auditory exercise	30
Class Time and Place: HKS - according to the published schedule	

II. TEACHING STAFF

Course Holder	
Name and Surname: Šikić Luka	
Academic Degree:	**Professional Title:** docent
Contact E-mail: luka.sikic@unicath.hr	**Telephone:**
Office Hours: According to the published schedule	
Course Assistant	

III. DETAILED COURSE INFORMATION

Teaching Language: Hrvatski

Course Description	This course introduces the fundamental statistics principles, focusing on developing research questions, hypothesis formation, research design, and data analysis. Students will gain practical experience using statistical software and learn the proper application of statistical tests. Moreover, the course highlights the importance of effectively communicating research results to various audiences, giving students the skills to present their findings. Students must pass two-semester and final oral exams to complete the course successfully.
Educational Outcomes	1. Demonstrate a solid understanding of fundamental statistical concepts, including probability theory, descriptive statistics, hypothesis testing, and basic inferential techniques. 2. Formulate research questions and generate testable hypotheses relevant to real-world problems in social science research. 3. Design and execute simple experiments, collect data, and apply appropriate statistical techniques to analyze and interpret the results. 4. Develop proficiency in using statistical software for data management, visualization, and analysis, as well as interpreting the output generated by the software. 5. Critically evaluate and assess the validity of statistical analyses and conclusions in scientific research papers and reports. 6. Collaborate effectively in group tasks and discussions, contributing to the collective understanding of statistical concepts and their applications. 7. Demonstrate a solid statistical foundation, paving the way for further studies in more advanced statistical techniques and methodologies.
Textbooks and Materials	
Required	Navarro, D. J. (2019). Learning Statistics with R: A tutorial for psychology students and other beginners. Adelaide, Australia: University of Adelaide Press. Available online: https://learningstatisticswithr.com/ Peck, R., Olsen, C., & Devore, J. L. (2011). Introduction to Statistics and Data Analysis. Boston: Cengage Learning. Weiss, N. A. (2015). Introductory Statistics. Boston: Pearson
Supplementary	Moore, D. S., Notz, W. I., & Flinger, M. A. (2018). The Basic Practice of Statistics. New York: W. H. Freeman and Company. Triola, M. F. (2017). Elementary Statistics. Boston: Pearson. De Veaux, R. D., Velleman, P. F., & Bock, D. E. (2016). Intro Stats. Boston: Pearson. Diez, D. M., Barr, C. D., & Çetinkaya-Rundel, M. (2014). OpenIntro Statistics. CreateSpace Independent Publishing Platform. Peck, R., Olsen, C., & Devore, J. L. (2011). Introduction to Statistics and Data Analysis. Boston: Cengage Learning. Johnson, R. A., & Kuby, P. (2016). Just the Essentials of Elementary Statistics. Boston: Cengage Learning. Agresti, A., & Franklin, C. (2013). Statistics: The Art and Science of Learning from Data. Boston: Pearson.
Examination and Grading	

To Be Passed DA	**Exclusively Continuous Assessment** NE	**Included in Average Grade** DA
Prerequisites to Obtain Signature and Take Final Exam	Attendance is crucial for success in this course, and students are expected to attend at least 70% of lectures and seminar sessions	

The final course grade is based on 100 points earned through the student's continuous involvement in-class activities:

Fair (2) – 50 to 64 points

Good (3) – 65 to 79 points

Very good (4) – 80 to 89 points

Excellent (5) – 90 to 100 points

Examination Manner

Earning credits:

Class activities contribute to 70% of the grade:

Exam 1 – maximum 35 points

Exam 2 – maximum 35 points

The final (oral) exam contributes to 30% of the grade:

Final exam – maximum of 30 points

Grading Manner

Class activities: Two-semester exams and a final oral exam.

Detailed Overview of Grading within ECTS

VRSTA AKTIVNOSTI	ECTS bodovi - koeficijent opterećenja studenata	UDIO OCJENE (%)
Pohađanje nastave	1.5	0
Kolokvij-međuispit	1.575	35
Kolokvij-međuispit	1.575	35
Ukupno tijekom nastave	4.65	70
Završni ispit	1.35	30
UKUPNO BODOVA (nastava+zav.ispit)	6	100

IV. WEEKLY CLASS SCHEDULE

[Predavanja]

#	Topic
1	Introduction to the course.
2	Introduction to the R programming language.
3	Descriptive statistics.
4	Graphs and visualization.
5	Basics of probability theory.
6	Estimating population parameters.
7	Testing statistical hypotheses.
8	Midterm exam.

9	Categorical data analysis.
10	Comparing means.
11	Linear regression.
12	ANOVA.
13	Factorial ANOVA.
14	Multivariate statistical models.
15	Final exam.