Detaljni izvedbeni plan

Akademska godina: 2024/2025	**Semestar:** Zimski
Godina studija: 1	**Studiji:** Komunikologija (R) (izborni) (Prijediplomski) Sestrinstvo (I) (izborni) (Prijediplomski) Sestrinstvo (R) (izborni) (Prijediplomski) Primaljstvo (R) (izborni) (Prijediplomski) Primaljstvo (I) (izborni) (Prijediplomski)

I. OSNOVNI PODACI O KOLEGIJU

Naziv kolegija: Introduction to Statistics

Kratica kolegija: IZBP233

ECTS bodovi: 6	**Šifra kolegija:** 252568

Preduvjeti za upis kolegija: Nema

Ukupno opterećenje kolegija

Vrsta nastave	**Ukupno sati**
Predavanje	30
Auditorna vježba	30

Mjesto i vrijeme održavanja nastave: HKS – prema objavljenom rasporedu

II. NASTAVNO OSOBLJE

Nositelj kolegija

Ime i prezime: Šikić Luka

Akademski stupanj/naziv:	**Izbor:** docent
Kontakt e-mail: luka.sikic@unicath.hr	**Telefon:**

Konzultacije: Prema objavljenom rasporedu

Suradnici na kolegiju

III. DETALJNI PODACI O KOLEGIJU

Jezik na kojem se nastava održava: Hrvatski

Opis kolegija	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.
Očekivani ishodi učenja na razini kolegija	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.
Literatura	
Obavezna	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
Dopunska	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.
Način ispitivanja i ocjenjivanja	

Polaže se DA	**Isključivo kontinuirano praćenje nastave** NE	**Ulazi u prosjek** DA

Preduvjeti za dobivanje potpisa i polaganje završnog ispita	Attendance is crucial for success in this course, and students are expected to attend at least 70% of lectures and seminar sessions

Način ocjenjivanja	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 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
Način polaganja ispita	Class activities: Two-semester exams and a final oral exam.

Detaljan prikaz ocjenjivanja unutar Europskoga sustava za prijenos bodova

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. TJEDNI PLAN NASTAVE

Predavanja

#	Tema
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.