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| **Course title** | Statistics in Psychology I | | | | | |
| **Course code** | PSY105 | | | | | |
| **Course type** | Compulsory | | | | | |
| **Level** | Undergraduate | | | | | |
| **Year / Semester** | Year 1 / Semester 2 | | | | | |
| **Teacher’s name** | Kyriaki Mikellidou | | | | | |
| **ECTS** | 7.5 | **Lectures / week** | 1 | **Laboratories / week** | | 0 |
| **Course purpose and objectives** | The purpose of this course is to give students a thorough understanding of the essential statistical ideas and methods required for carrying out rigorous research in the field of psychology. Students who complete this course will have the knowledge and abilities needed to efficiently analyze, interpret, and come to reliable conclusions from psychological data. Students will be better equipped to evaluate existing research critically, create their own experiments, and expand our understanding of psychology by mastering these statistical methods. | | | | | |
| **Learning outcomes** | The following learning outcomes are expected, where students will:   1. Exhibit a firm grasp of the basic statistical principles and vocabulary that apply to psychology. 2. Use descriptive statistics to analyze and interpret psychological data. 3. Describe the fundamental ideas behind sampling and probability theory and their application in psychology. 4. Conduct statistical studies using statistical software and interpret results in the context of psychological research questions. 5. Communicate statistical findings effectively to both technical and non-technical audiences. | | | | | |
| **Prerequisites** | None | | **Required** | | Yes | |
| **Course content** | Students should acquire a thorough understanding of the essential statistical ideas and methods required for carrying out rigorous research in the field of psychology. Students who complete this course will have the knowledge and abilities needed to efficiently analyze, interpret, and come to reliable conclusions from psychological data. Students will be better equipped to evaluate existing research critically, create their own experiments, and expand our understanding of psychology by mastering these statistical methods.  Week 1: Introduction to Statistics in Psychology  Week 2: Descriptive Statistics  Week 3: Data Visualization  Week 4: Probability and Sampling Distributions  Week 5: Introduction to Inferential Statistics  Week 6: Confidence Intervals  Week 7: Parametric Tests  Week 8: Nonparametric Tests  Week 9: Correlation and Regression  Week 10: Ethical Considerations in Statistical Analysis  Week 11: Practical Data Analysis with Statistical Software  Week 12: Critical Evaluation of Research Studies  Week 13: Application of Statistical Techniques  Week 14: Communicating Statistical ResultsTop of Form | | | | | |
| **Teaching methodology** | Lecture and labs | | | | | |
| **Bibliography** | Field, A. (2018). Discovering Statistics Using IBM SPSS Statistics. Sage Publications.Top of Form | | | | | |
| **Assessment** | 1. Midterm & Final Exam (30% & 30%): Mid-term and final exams will be conducted covering the entire course. Both exams will include multiple-choice, short-answer, and essay questions. 2. Group assignment (25%), where students will work together to analyse a provided dataset and present their findings. 3. Individual in-class assignment (5%), where students will be asked to perform specific analyses using statistical software. 4. Presence and Participation (10%): Students should be present and actively participate in in-class discussions. | | | | | |
| **Language** | English | | | | | |