



People's Democratic Republic of Algeria
Ministry of Higher Education and Scientific Research
Mohamed Kheider University of Biskra
Faculty of Letters and Languages
Department of English Language and Literature



Statistics syllabus

Lecturer in charge: Pr. Saliha CHELLI

Level: Master one

Semester: Two

Text books:

1. Greasley, P. (2008). Quantitative data analysis: an introduction for health social science. Grew Hill. Open University
2. Howit, D, Cramer, D. (2005). First steps in research and statistics: A practical workbook for psychology students. Taylor & Francis Group: Routledge.
3. Miller, S. (2005). Experimental design and statistics. London & New York: Routledge.

Course description

This course is an introduction to research statistics. Its focus is on the use of statistical procedures used in quantitative research methods. Topics include a revision of some concepts essential in research and statistics such as: types of variables, hypotheses and sampling methods as well as the different research methods and how a research is planned. Then, the students will be introduced to elementary principles and applications of descriptive statistics. In addition to the theoretical lectures, students will be trained in different computations required in quantitative data analysis.

Student learning objectives

Students will develop specific skills, competencies, and thought process sufficient to support further study. They will acquire a level of proficiency in the fundamental concepts and application necessary for further academic study requiring statistics in their field as a prerequisite.

Tentative Lecture Schedule subject to change and adaptation

| MONTH | WEEK | LECTURE/ TUTORIAL | OBSERVATION |
|----------|--------|--|-------------|
| February | 1 | - Syllabus, classroom expectations Unit 1: The basics of research/statistics 1. Types of variables | |
| | 3 | 2. Research questions and hypotheses | |
| | 3 | Follow up | |
| | 4 | Unit 2 : Introduction to statistics 1. Definition 2. Nature of data 3. Levels of measurement of data | |
| March | 1 | Unit 3: A. Descriptive Statistics Describing and summarizing data 1. Describing and summarizing categorical data - Frequencies/ Distribution frequency-tables - Calculation of percentages/ - Displaying graphically categorical data/ Bar charts - Calculation of portions/ pie charts | |
| | 2 | 2. Describing and summarizing score data A. Descriptive Statistics - Frequencies - Measures of central tendency: mode, median, mean | |
| | 3 4 | SPRING HOLIDAYS | |
| April | 1 | More Practice | |
| | 2 | Measures of dispersion (variability): range, variance, standard deviation | |
| | 3 | Running descriptive statistics using SPSS | |
| | 4 | More practice | |
| May | 1 | Revision | |
| | 2 | EXAM | |

Course material: The course material consists of power-points, readings selected from the required books

Assessment: The exam (100%) is based on the lectures and readings..