



INITIATION COURSE TO SPSS FOR FMUL STUDENTS

Date of the Attended Session: 21st of March 2009

E-learning Component: 14th to 28th of March 2009

Length of Course: 20 hours

Attended Session: 8 hours (from 9 am to 1 pm and 2 pm to 6 pm)

E-learning Session: 12 hours

Venue of Attended Session: Egas Moniz Building – FMUL; Room 49

Target Students: Students attending the Integrated Masters Course in Medicine at the FMUL

Places and Selection Criteria: The number of places is 26 students, with selection preference being given to students who have already participated in the “Education through Science” Programme and to those who are attending the final curricular years of the Integrated Masters Course in Medicine.

Enrolments: From the 2nd to the 6th of March 2009

Enrolment form available on: www.fm.ul.pt/GAPIC

Cost: € 50 (*payment after selection of those enrolled*)

Teacher: Sónia Barroso (*MSc in Statistics and Information Management*)

Organization: Bureau for Scientific, Technological and Innovation Research Support (GAPIC)

Support: Support Groups for Learning with Electronic Means (GAAME)

Introduction:

In the area of health statistics is a fundamental tool for organising, presenting, analysing and interpreting data, although a large number of students, researchers and health professionals have a certain reticence in relation to this area of knowledge. Aware of the importance of statistics, above all in the field of scientific research, GAPIC, as a support office for scientific research, namely on the undergraduate level, is organising this course in order to respond to some of the needs felt by FMUL students.

In this course, besides showing the potential of statistics in the field of health, the intention is to make FMUL students familiar with the terminology of statistical theory and to grant them with general knowledge for an adequate application in practice, using SPSS as a support. On the pedagogical level this course also aims at stimulating self-learning and collaboration work, competences that are essential in today's society of information and knowledge.

Specific Aims:

At the end of the module students should:

- a) Be aware of the role of statistics in the area of health;
- b) Identify and distinguish different types of samples;
- c) Identify, define and graphically represent the different types of variables;
- d) Handle the functionalities of SPSS;
- e) Manipulate data in SPSS, applying procedures from descriptive statistics and statistical inference;
- f) Select the most adequate statistical test according to the type of variables;
- g) Interpret the results of descriptive statistics and of statistical inference;
- h) Develop capacities on the level of research and self-learning in statistics;
- i) Acquire competences for collaborative and team work;
- j) Handle interactive tools that facilitate collaborative work (chat rooms, discussion forums, search engines, etc).

Structure of the Programme:

1. Presentation of the course, the students and the teacher
2. Statistics in the area of health
3. Sampling: some types of samples and the size of the sample
4. Types of variables, scales of measurement and graphic representation
5. Initiation to SPSS: creation and transformation of data
6. Descriptive Statistics – revision of some notions and measures
7. Statistical Inference – Introduction to Statistical Tests:
Q-Squared Test, T and F Tests, Analysis of Correlation and Linear Regression
8. Practical Exercises and clarification
9. Elaboration and presentation of final work

Teaching Methodology:

The course will be lectured in the regime of blended learning: a virtual component and an attended component. The virtual component will use group work and collaboration as a teaching strategy, with recourse to interactive tools. The teaching methods used during the attended session will be the expositional, interrogative and the demonstrative/active.

Assessment:

Assessment of the students will be continuous, through their participation, commitment and solving of the exercises proposed in the attended session and in the virtual sessions, with a certificate being granted to those who are successful in the course.

Support Bibliography:

Maroco J. Análise Estatística – Com utilização do SPSS. Lisbon, Edições Sílabo, 2003.

Pereira A. Guia prático de utilização do SPSS – Análise de dados para ciências sociais e psicologia. Lisbon, Edições Sílabo, 1999.

Pestana MH, Gageiro JN. Análise de dados para as ciências sociais – A complementaridade do SPSS. Lisbon, Edições Sílabo, 2003.

Vicente P, Reis E, Ferrão F. Sondagens – A amostragem como factor decisivo de qualidade. Lisbon, Edições Sílabo.

Vidal MV. Estatística Prática para as Ciências da Saúde. Lisbon, Lidel, 2005.

Information and Contacts

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