

Información del Plan Docente

| Academic Year | 2016/17 |
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| Academic center | 229 - Facultad de Ciencias de la Salud y del Deporte |
| Degree | 295 - Degree in Physical Activity and Sports Science |
| ECTS | 6.0 |
| Course | 1 |
| Period | First semester |
| Subject Type | Basic Education |
| Module | |

- 1.Basic info
- 1.1.Recommendations to take this course

1.2. Activities and key dates for the course

- 2.Initiation
- 2.1.Learning outcomes that define the subject
- 2.2.Introduction
- 3.Context and competences
- 3.1.Goals
- 3.2.Context and meaning of the subject in the degree
- 3.3.Competences
- 3.4.Importance of learning outcomes
- 4.Evaluation

5. Activities and resources

5.1.General methodological presentation

The learning process designed for this course is based on the following:

1. Theoretical classes: teachers will use the support of audiovisual and computer resources when appropriate, and also will seek interaction with students. Maximum 50% of the classes.

2. Techniques and tools for problem solving: solving techniques of exercises and problems using computers will be taught in class. Also, problems and exercises will be proposed. Students must do by they own a personal work for the resolution



of the proposed problems and to write the solutions. At least 30% of the classes.

3. Seminars for theory / problems / computer practices: In these seminars students pose the doubts and difficulties that have been found, so that the teacher's role will be to give specific instructions to unblock the situation. At least 20% of classes.

4. Tutorials. Personal tutorials scheduled by the teacher.

5. Personal work. Individual study will allow to settle the concepts explained in the classes as well as learn and properly apply the techniques explained. Students must handle other literature proposed by the teacher, in addition to the lecture notes. They also must dedicate a significant part of their time to solving the proposed exercises.

The subject appears in the Moodle platform of the University of Zaragoza, where students can obtain information on the subject, notes, other literature, supplementary material, problem sheets, etc.

5.2.Learning activities

The program offered to the students to help them achieve the expected results includes the following activities ...

Theoretical and practical lectures and computer practices, conducting exercises, tutorials and seminars on topics of qualitative methodology and statistics.

5.3.Program

- I: Introduction to research of physical activity
- I.1.- Clarification conceptual: science, research and scientific method.
- I.2.- Paradigms of social science research.
- I.3.- Science Research Paradigms of physical activity and sport.
- I.4 Research in Physical Education: The qualitative and quantitative in and physical activities.
- II: Application of qualitative research of physical activity and sport methodology
- II.1.- Overview and characteristics of qualitative methodology.
- II.2.- Research designs in qualitative methodology.

Criteria



- II.3.- Credibility of qualitative methodology.
- II.4.- Techniques and research tools in qualitative methodology.
- III: Development of research reports
- III.1.- The investigation report.
- III.2.- Structuring the object of study.
- III.3.- planning, organization and development of analysis and data processing.
- IV.- Introduction to Statistics
- IV.1.- Introduction.
- IV.2.- Random phenomena and deterministic phenomena.

V.- Descriptive statistics

- V.1.- Introduction.
- V.2.- Statistical variables. Types.
- V.3.- Graphic representations.
- V.4.- Moments. Centralization measures. Measures of dispersion, other measures.
- V.5.- Two-dimensional frequency distribution. Measures of association.
- V.6.- Simple linear regression. Regression lines. Linear correlation coefficient.
- VI.- Inferential statistics
- VI.1.- Introduction.



VI.2.- Point estimation of parameters .

VI.3.- Confidence interval estimation .

VI.4.- Hypothesis testing .

5.4. Planning and scheduling

The timetable of classes fits to the schedule approved by the Faculty of Health and Sports Sciences.

Dates of evaluation and delivery of work is fixed sufficiently in advance and announced to students.

5.5.Bibliography and recomended resources

- Fernández Cuesta, Carlos. Curso de estadística descriptiva : teoría y práctica / Carlos Fernández Cuesta y Felipe Fuentes García . [1a ed.] Barcelona : Ariel, 1995
- Ríos, Sixto. Métodos estadísticos / Sixto Ríos . 2a ed. Madrid : Ediciones del Castillo, 1977 (1985 imp.)
- Kazmier, Leonard J.. Estadística aplicada a la administración y a la economía / Leonard J. Kazmier, Alfredo Díaz Mata . 2ª ed. rev. México : McGraw-Hill Interamericana de Mexico, 1993
- Viladot Voegeli, Antonio. Lecciones básicas de biomecánica del aparato locomotor / Antonio Viladot Voegeli ; prólogo, D. Ruano Gil. Reimp. Barcelona : Masson, 2004
- Barriopedro, María Isabel. Análisis de datos en las ciencias de la actividad física y el deporte / María Isabel Barrriopedro, Carlos Muniesa . Madrid : Pirámide, 2012
- Martín Pliego, Francisco Javier. Introducción a la estadística económica y empresarial : teoría y práctica / Fco. Javier Martín-Pliego López . 3a. ed. rev. y act. / por Marta García Secades Madrid : Thomson, D.L. 2004