Universitat de Lleida

# DEGREE CURRICULUM
# COMPUTER SCIENCE AND STATISTICS

Coordination: VAQUERO TIÓ, EDUARD

Academic year 2018-19

## Subject's general information

| | |
|---|---|
| **Subject name** | COMPUTER SCIENCE AND STATISTICS |
| **Code** | 101704 |
| **Semester** | 1st Q(SEMESTER) CONTINUED EVALUATION |

| **Typology** | Degree | Course | Character | Modality |
|---|---|---|---|---|
| | Bachelor's Degree in Social Worker | 2 | COMMON | Attendance-based |

| | |
|---|---|
| **Course number of credits (ECTS)** | 6 |

| **Type of activity, credits, and groups** | Activity type | PRAULA | TEORIA |
|---|---|---|---|
| | **Number of credits** | 1.8 | 4.2 |
| | **Number of groups** | 2 | 1 |

| | |
|---|---|
| **Coordination** | VAQUERO TIÓ, EDUARD |
| **Department** | MATHEMATICS |
| **Important information on data processing** | Consult this link for more information. |

| Teaching staff | E-mail addresses | Credits taught by teacher | Office and hour of attention |
|---|---|---|---|
| ESTRADA ROCA, MA ASSUMPTA | aestrada@matematica.udl.cat | 3,9 | |
| VAQUERO TIÓ, EDUARD | eduardvt@pip.udl.cat | 3,9 | |

# Learning objectives

- Express clearly and precisely the key concepts of the subject.
- Know the characteristics of the current sociotechnological context and the role of ICT.
- Expose, reflectively and critically, the elements that shape and determine digital inclusion and exclusion in vulnerable groups.
- Understand the main strategies for the integration of ICT in the field and professional profile of the social worker.
- Use correctly the main functions of the computer applications commonly used in the work environment of the social worker.
- Manifest an attitude of integration of ICT in their professional development as a social worker.
- Organize and interpret information from the work environment of the social worker.
- Know the descriptive statistics and its applications in the social sciences.
- Use correctly the most usual statistical distributions in social analysis.
- Approach effectively the search, reading and critical commentary of texts related to social work
- Cooperatively solve social content study tasks.

# Competences

- CG1 Develop critical capacity, analysis and synthesis
- CG2 Show organizational and planning capacity
- CG4 Develop in teamwork and leadership
- CG7 Exercise autonomous learning and adaptation to new situations
- CT1 Implement oral and written communication in the mother tongue
- CT2 Acquire the mastery of a foreign language.
- CT3 Use ICT in the professional context and ability to manage information
- CE14 Use the knowledge of best practices to review and update the knowledge itself.
- CE17 Know the basic statistical packages capable of processing the most common statistical distributions in social analysis.

# Subject contents

- The statistics and its applications.
- Organization of information. Frequencies, tables and graphs.
- Measures of central tendency and dispersion.
- Regression and linear correlation.
- Computer applications
- The information society and ICT.
- Digital literacy and inclusion and exclusion Digital.cat
- Integration of ICT in the field and professional profile of the social worker.
- Technological risks and potential

- ICT and socio-educational research.

## Methodology

*Attendance (40%) 2,4 ECTS*

| Master class group lesson (40%) | 24 horas |
|---|---|
| Classroom practices in small group or individual (40%) | 24 horas |
| Seminars (10%) | 6 horas |
| Small group or individual tutoring (10%) | 6 horas |

*Non-attendance (60%) 3,6 ECTS*

| Study of the theoretical and practical contents (44%) | 40 horas |
|---|---|
| Reading of texts and elaboration of related tasks (12%) | 10 horas |
| Information management using ICT (22%) | 20 horas |
| Research work done cooperatively (22%) | 20 horas |

| ECTS | Hours | Total hours | Attendance | Non-attendance | Class group | Small group |
|---|---|---|---|---|---|---|
| 6 | 25 | 150 | 60 | 90 | 42 | 18 |
| % of total hours | 40% | 60% | 70% | 30% | | |

## Development plan

The work plan will be detailed at the beginning of the course.

## Evaluation

The subject includes two types of evaluation, continuous and alternative.

**Continuous mode:**

The continuous modality includes the following evaluation activities:

| Evaluation activity | % | Type | Minimum qualification to mean | Evaluation date |
|---|---|---|---|---|
| Social web research project | 45% | mandatory | 4 points to 10 | It will be informed at the beginning of the course |
| Written test | 45% | mandatory | 4 points to 10 | It will be informed at the beginning of the course |
| | | | | |

| Computer and statistical practices | 10% | attendance and madatory | Suitable | - |
|---|---|---|---|---|

**Alternative mode:**

The student who wishes it will have the right to renounce the continuous evaluation at the beginning of the course and take advantage of the alternative evaluation modality at the end of the subject. To do this, you must submit an instance in the secretariat within the deadline and provide supporting documentation of work activity and / or other personal situations that prove that you can accept this type of modality.

| Evaluation activity | % | Type | Minimum qualification to mean | Evaluation date |
|---|---|---|---|---|
| Social web research project | 40% | mandatory | 4 points to 10 | It will be informed at the beginning of the course |
| Written test | 60% | mandatory | 4 points to 10 | It will be informed at the beginning of the course |

**Recuperation:**

There will be recuperation tests for those students who do not obtain the minimum qualification to weight on those evidences that have a weight equal to or greater than 30%. These tests can not be used to upload a grade. In the case of making the recovery of any of the activities, the grade of that evidence will never exceed 6 out of 10.

| Evaluation activity | % | Type | Minimum qualification to mean | Evaluation date |
|---|---|---|---|---|
| Social web research project | 45-40% | mandatory | 4 points to 10 | It will be informed at the beginning of the course |
| Written test | 45-60% | mandatory | 4 points to 10 | It will be informed at the beginning of the course |

**Notes:**

The final grade of the subject is the result of the weighted average of the different evaluation activities according to the criteria collected in the previous tables according to the evaluation modality. The evaluation criteria for each of the activities, as well as the hours and classrooms of the exams will be announced at the beginning of the subject. The subject is considered passed when the student has obtained a final numerical grade equal to or greater than 5 out of 10.

The works that are made in the development of the subject will always incorporate a bibliography and webgraphy where a minimum of 10 documents come from books and / or magazines.

An indispensable requirement is the linguistic and formal correction in the written productions following the guide of works that you will find in http://www.fce.udl.cat/Recursos/guies/guiatreballs.pdf

Works with more than 10 misspellings or incorrectly submitted will be returned to the student for correction. These formal errors will affect up to 10% of the qualification of the subject.

The productions of the students must be original. Plagiarism or copying in a single evaluation evidence is a sufficient reason for suspending the evidence and may lead to the suspension of the subject. The faculty will be able to use the tools and criteria anticopia and antiplane that they consider appropriate.

## Bibliography

**BASIC REFERENCES**

Bauman, Z. (2011). Daños colaterales. Desigualdades sociales en la era global. Madrid: FCE

Calvo, F. (1994). Estadística teòrica y aplicada Ed. Deusto.

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Ortoll, E. i altres (2006): L'alfabetització digital en els processos d'inclusió social. Barcelona: UOC


**COMPLEMENTARY REFERENCES**

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Bisquerra, R. (1989). Métodos de investigación educativa. P.P.U. Barcelona.

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