



Universitat de Lleida

DEGREE CURRICULUM  
**COMPUTER SCIENCE AND  
STATISTICS**

Coordination: VAQUERO TIÓ, EDUARD

Academic year 2020-21

## Subject's general information

<b>Subject name</b>	COMPUTER SCIENCE AND STATISTICS			
<b>Code</b>	101704			
<b>Semester</b>	1st Q(SEMESTER) CONTINUED EVALUATION			
<b>Typology</b>	<b>Degree</b>	<b>Course</b>	<b>Character</b>	<b>Modality</b>
	Bachelor's Degree in Social Worker	2	COMMON	Attendance-based
<b>Course number of credits (ECTS)</b>	6			
<b>Type of activity, credits, and groups</b>	<b>Activity type</b>	PRAULA		TEORIA
	<b>Number of credits</b>	1.8		4.2
	<b>Number of groups</b>	2		1
<b>Coordination</b>	VAQUERO TIÓ, EDUARD			
<b>Department</b>	PEDAGOGIA			
<b>Teaching load distribution between lectures and independent student work</b>	100% Non presence			
<b>Important information on data processing</b>	Consult <a href="#">this link</a> for more information.			
<b>Language</b>	Catalan			
<b>Distribution of credits</b>	3ECTS Informatic 3ECTS Statistical			

Teaching staff	E-mail addresses	Credits taught by teacher	Office and hour of attention
ESTRADA ROCA, MA ASSUMPTA	assumpta.estrada@udl.cat	3,9	
FERNÁNDEZ RODRIGO, LAURA	laura.fernandez@udl.cat	1,8	
VAQUERO TIÓ, EDUARD	eduard.vaquero@udl.cat	2,1	

## Subject's extra information

For the correct development of the subject the following orientations and communicative requirements are foreseen:

- The communications related to the subject will be made through the space of the virtual campus of the subject, making exclusive use of the tool of forums and messages. Forum tools, messages and space announcements are reserved for strictly matter-related issues.
- Emails will not be answered. This tool is reserved exclusively for emergency or force majeure issues.
- Teachers will only respond to messages posed through the subject space on the virtual campus asynchronously within a period not exceeding 48 hours. In the event that this period is exceeded, the teacher will be able to inform the student of the period in which it will be answered.
- Synchronous communication tools, such as video conferencing or chats, are reserved exclusively for conducting lectures and tutorials, without prejudice to other uses that teachers may consider to develop different teaching strategies.
- Teachers may require student participation at any time through synchronous and asynchronous communication tools.
- For a proper follow-up of the subject, students must have an internet connection, a camera and a microphone.

## 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.
- 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

The teaching is part of the "Hybrid Classrooms" project, which aims to design participatory teaching and learning processes based on a model of hybrid education (blended learning).

The course will be developed entirely in online mode, combining synchronous and asynchronous non-contact sessions. Under this training modality, virtual sessions will be combined that include the realization of videoconferences and other teaching and learning strategies of reverse teaching, problem-based learning, case studies, collaborative and cooperative learning, group work or readings.

This methodological approach involves the student taking responsibility for their learning process by acquiring a high commitment in the monitoring of the subject, participation in communication spaces and carrying out learning and assessment activities.

## Development plan

Given the situation of uncertainty generated by the COVID-19 pandemic, the development plan of the subject will be reported in detail at the beginning of the academic year. If the situation requires it, the teachers will be able to adapt the development plan of the subject as well as the methodological strategies.

## 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	40%	mandatory	4 points to 10	It will be informed at the beginning of the course
Informatic activities	30%	mandatory	4 points to 10	Continuous
Statistical activities	30%	mandatory	4 points to 10	Continuous

## 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.

The alternative modality includes the following evaluation activities:

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
Informatic activities	30%	mandatory	4 points to 10	Continuous
Statistical activities	30%	mandatory	4 points to 10	Continuous

## 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.

## 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.
- Castillo, N. y otros (2001) "Recursos socials des de la xarxa: les possibilitats d'Internet per als agents socials" a Educació Social, 19, 41-47
- Etxeberria, J., y Tejedor, F. (2005) Análisis descriptivo de datos en educación. La Muralla
- Ortoll, E. i altres (2006): L'alfabetització digital en els processos d'inclusió social. Barcelona: UOC

### COMPLEMENTARY REFERENCES

- Area, M., Gros, B. I., Marzal, M. A., & Àrea, M. (2008). Alfabetizaciones y Tecnologías de la Información y la Comunicación. Madrid: Editorial Síntesis.
- Aron, A. (2001) Estadística para psicología. Prentice-Hall
- Bisquerra, R. (1989). Métodos de investigación educativa. P.P.U. Barcelona.
- Castaño, C. y otros (2008): Prácticas educativas en entornos web 2.0. Madrid: Síntesis.
- Castells, M. (2000): "Aprender en la Sociedad de la Información". Resumen de la conferencia pronunciada en Madrid, el 31 de mayo de 2000, Seminario de Primavera de la Fundación Santillana.  
<[http://www.educacionenvalores.org/article.php3?id\\_article=1618](http://www.educacionenvalores.org/article.php3?id_article=1618)>
- Castillo, N. y otros (2001) "Recursos socials des de la xarxa: les possibilitats d'Internet per als agents socials" a Educació Social, 19, 41-47
- Chacón, A. (2007): "El hipertexto y las páginas web" a Nuevas Tecnologías para la Educación en la Era Digital. Madrid: Piràmide.
- Etxeberria, J., y Tejedor, F. (2005) Análisis descriptivo de datos en educación. La Muralla
- Farré, M. (2005) Estadística: un curs introductor i per a estudiants de ciències socials i humanes Publicacions de la Universitat Autònoma de Barcelona.
- Forés, A. y otros (2001): "Agentes socials "digitalitzats"? Formació i acció en la societat xarxa" a Educació social 19, 21-40.
- Gil Flores, J. (1996) Problemas de Estadística bàsica aplicados a las ciencias de la educación .Kronos
- Olarrea, J., y Cordero, M. (2007). Estadística : 45 problemas útiles. Garcia-Maroto.
- Peña, D i Romo, J (1997) Introducción a la Estadística para las Ciencias Sociales. McGraw-Hill.
- Peralta et al. (2007) Estadística: problemas resueltos. Piràmide
- Pérez, C (2002) Estadística aplicada a través de Excel. Prentice-Hall
- Tomeo, V., y Uña, I. (2003). Lecciones de estadística descriptiva: curso teórico-práctico. Thomson.
- Wallace, P. (2001): La Psicología de Internet. Madrid: Paidós