COURSE DATA

DATA SUBJECT

Code: 33006
Name: Use of Information communication technology (ICT)
Cycle: Undergraduate Studies
ECTS Credits: 6
Academic year: 2026-27

STUDY (S)

Degree	Center	Acad. year	Period
1202 - Degree in Physiotherapy	Facultat de Fisioteràpia	1	First quarter

SUBJECT-MATTER

Degree	Subject-matter	Character
1202 - Degree in Physiotherapy	Information technology	BASIC

COORDINATION

CASAÑA GRANELL JOSÉ

ESCRICHE ESCUDER ADRIAN

SUMMARY

Introduction and use of ICT applied to Phisiotherapy (Artificial intelligence, Social Media, Informatics, Ofimatic and Multimedia tools) and familiarization with the basic process of searching for information and preparing scientific papers.

PREVIOUS KNOWLEDGE

RELATIONSHIP TO OTHER SUBJECTS OF THE SAME DEGREE

There are no specified enrollment restrictions with other subjects of the curriculum.

OTHER REQUIREMENTS

It is not necessary previous requirements.

COMPETENCES / LEARNING OUTCOMES

1202 - Degree in Physiotherapy

Acquire basic knowledge about hardware and software.

Acquire knowledge related to the information and communication technologies.

Acquire sensitivity to environmental issues.

Have the ability to organise and plan work.

Know and understand the sciences, models, techniques and instruments on which Physiotherapy is based, structured and developed

Know how to use basic office software.

Know how to use servers and e-mail.

Know how to use the Aula Virtual of the Universitat de València.

Recognise diversity, multiculturality, democratic values and peace culture.

Respect fundamental rights and equality between men and women.

Students must be able to apply their knowledge to their work or vocation in a professional manner and have acquired the competences required for the preparation and defence of arguments and for problem solving in their field of study.

Students must be able to communicate information, ideas, problems and solutions to both expert and lay audiences.

Students must have acquired knowledge and understanding in a specific field of study, on the basis of general secondary education and at a level that includes mainly knowledge drawn from advanced textbooks, but also some cutting-edge knowledge in their field of study.

Students must have developed the learning skills needed to undertake further study with a high degree of autonomy.

Students must have the ability to gather and interpret relevant data (usually in their field of study) to make judgements that take relevant social, scientific or ethical issues into consideration.

Work in teams.

Work on and systematically complete physiotherapy records

DESCRIPTION OF CONTENTS

1. GENERAL ENVIRONMENT

Unit 1. ICT in Physiotherapy.
Unit 2. Introduction to computer science and telecommunications.
Unit 3. Treatment of information. Basic tasks.
Unit 4. Artificial intelligence and social networks.
Unit 5. Security, privacy, protection and confidentiality of data.

2. SPECIFIC ENVIRONMENT

Unit 6. Office suite and Multimedia.
Unit 7. Multimedia presentations. Written and oral strategies for your communication.
Unit 8. Disclosure of information. Infographics, podscast, videos.
Unit 9. Web tools and applications in physiotherapy
Unit 10. E-health, telehealth, digital practice and telephysiotherapy.

3. SCIENTIFIC ENVIRONMENT

Unit 11. Basic aspects of research in physiotherapy.
Unit 12. Search for scientific information. Bibliographic databases, search engines, portals and managers of information.
Unit 13. Management of scientific information. Storage of bibliographical resources.
Unit 14. Communication of information, oral presentations, posters, articles and other scientific documents.

4. PRACTICAL

Practice 1. Environment and general UV resources.
Practice 2. UV user specific environment and resources.
Practice 3. Artificial intelligence and applications in physiotherapy.
Practices 4 and 5. Office applications (PowerPoint, Word, Excel).
Practices 6 and 7. Dissemination resources (Poster, triptych and infographic).
Practices 8 and 9. Multimedia edition.
Practice 10. ICTs in the research process.

WORKLOAD

PRESENCIAL ACTIVITIES

Activity	Hours
Theory	20,00
Computer classroom practice	40,00
Total hours	**60,00**

NON PRESENCIAL ACTIVITIES

Activity	Hours
Attendance at other activities	0,00
Individual or group project	30,00
Independent study and work	30,00
Preparation of lessons	15,00
Preparation for assessment activities	15,00
Resolution of case studies	0,00
Total hours	**90,00**

TEACHING METHODOLOGY

The content of the theoretical classes will be addressed through lectures, participatory group activities, and cooperative learning strategies. Problem-solving will also be employed, and certain topics will be explored in depth through seminars and workshops.

In the practical classes, work will focus mainly on solving exercises and problems, as well as studying specific case studies. Some of these activities will be carried out in groups.

Students will be required to complete an individual assignment and a group project, in which they will present a project related to the practical content. Additionally, each student must prepare a personal portfolio.

The teaching program and its contents may be modified throughout the course if the responsible professor, based on criteria of teaching quality and the degree of content assimilation by the students, deems it appropriate.

EVALUATION

THEORETICAL PART: **30% FINAL GRADE**

- Multiple choice test: **30%**

The exam will be administered in either paper or digital format (as determined by the instructor) and will consist of a total of 30 questions. Each question will have 4 possible options, with only one correct answer.

GRADE= [right guess- (errors/nº de answers-1)]*(Maximum Calification/nº of answers)

PRACTICAL PART: **70% FINAL GRADE**

- Attendance at practices: 10%
- Group elaboration of a project and its presentation: 60%

The evaluation criteria and oral presentation will be provided by the teacher at the time.

Attendance is mandatory at all practices and only an absence of 20% of the total of these can be duly justified.

The score of the subject will be the sum of the maximum score obtained in block theory and the maximum score obtained in the practice block. Each test set will be valued over 10, and then get the percentage of each one.

The final grade for the course will be averaged, provided the student has obtained at least 5 of 10 in each of the sections and obtained 80% attendance at practices:

- Project group
- Multiple choice test

Take into account the following considerations:

- Plagiarism of any content will the suspense of the subject
- Penalize the incorrect spelling

REFERENCES

BASIC

- Area Moreira, M. (2021). Tecnologías digitales y educación: Repensar la enseñanza para una sociedad digital. Editorial Graó.
- Bartolomé Pina, A. R. (2022). Diseño de materiales multimedia para la enseñanza y el aprendizaje. Editorial Síntesis.
- Cabero-Almenara, J. (2020). Tecnologías emergentes en educación: Realidades, experiencias y desafíos. Editorial Octaedro.
- Coll, C., Mauri, T., & Onrubia, J. (2018). Uso educativo de las tecnologías digitales en tiempos de cambio. Editorial Narcea.
- Gros Salvat, B. (2020). Educación y tecnología: El poder de la transformación digital. Editorial Morata.
- Salinas Ibáñez, J. (2019). Innovación educativa y uso de las TIC: Claves para una integración efectiva. Editorial UOC.

ADDITIONAL

- Díaz, M. C., & Yániz, C. (2015). Las TIC en el ámbito de la Fisioterapia: aplicación en la docencia y en la práctica profesional. Revista Española de Educación Médica, 18(3), 165¿172. https://doi.org/10.6018/edumed.18.3.230611

- Pastora-Bernal, J. M., et al. (2017). Tele-rehabilitación en fisioterapia: revisión sistemática de la literatura científica. Revista Internacional de Medicina y Ciencias de la Actividad Física y del Deporte, 17(66), 343¿361. https://doi.org/10.15366/rimcafd2017.66.007

- La implementación de la telemedicina y la telesalud en fisioterapia: una revisión narrativa. Fisioterapia, 43(5), 265¿271. https://doi.org/10.1016/j.ft.2021.03.005

Likewise, each topic will include a list of recommended books, scientific articles, and relevant readings for the preparation of the content covered.