

**COURSE DATA****Data Subject**

Code	34734
Name	Introduction to research into dentistry and the publication and dissemination of results
Cycle	Grade
ECTS Credits	6.0
Academic year	2022 - 2023

Study (s)

Degree	Center	Acad. year	Period
1206 - Degree in Dentistry	Faculty of Medicine and Odontology	2	Second term

Subject-matter

Degree	Subject-matter	Character
1206 - Degree in Dentistry	31 - Introduction to research in dentistry, publication and dissemination of results	Optional

Coordination

Name	Department
MONTIEL COMPANY, JOSE MARIA	131 - Stomatology

SUMMARY

It's an optional subject that offers to the student an introductory vision of how the science works in dentistry, and the way of thinking and acting of the science for the acquisition of new knowledge applied to a branch of knowledge with peculiar characteristics like dentistry.

This must stimulate the student's critical thinking, necessary in a world that changes rapidly, and allow him imply with more safety in works of investigation of different type and aim.

The subject is divided in 2 big thematic units that are given by two different departments: Department of Stomatology and the Department of History of the Science and Documentation.



PREVIOUS KNOWLEDGE

Relationship to other subjects of the same degree

1206 - Degree in Dentistry :

1210 - Grado de Odontología 2012 :

R4-OBLIGATION TO HAVE SUCCESSFULLY COMPLETED THE COURSE

34703 - Biostatistics and public health

34708 - Documentation, professionalism and forensic dentistry

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Other requirements

Its advisable to have previous knowledge of statistics, managing of computers and capacity for reading scientific papers in English.

OUTCOMES

1206 - Degree in Dentistry

- Promover el aprendizaje de manera autónoma de nuevos conocimientos y técnicas, así como la motivación por la calidad.
- Conocer, valorar críticamente y saber utilizar las fuentes de información clínica y biomédica para obtener, organizar, interpretar y comunicar la información científica y sanitaria.
- Saber compartir información con otros profesionales sanitarios y trabajar en equipo.
- Conocer el método científico y tener capacidad crítica para valorar los conocimientos establecidos y la información novedosa.

LEARNING OUTCOMES

- To realize an effective bibliographical search.
- To distinguish and to classify the scientific articles and other sources of information, based in the level of evidence.
- To realize critical readings of scientific papers.
- To elaborate a scientific communication (poster) and exhibit to other professionals.



- To obtain an aim of investigation in collaborative work.
- To know the principal types of designs of investigation in dentistry.
- To elaborate a protocol of investigation adapted to the question of investigation.
- To analyze and to choose the strategy of analysis of information depending on the type of design of investigation.

DESCRIPTION OF CONTENTS

1. DENTAL RESEARCH

- Topic 1: The scientific method. Causality and confusion. Phases of the investigation.
- Topic 2: Ethics in research.
- Topic 3: Types of studies. Experimental studies and observational studies: cross-sectional, case-control and cohort studies.
- Topic 4: Sampling and sample size. Power of a study.
- Topic 5: Frequency and association measurements. Sensitivity and specificity. Agreement. Survival.
- Topic 6: Design and validation of questionnaires.
- Topic 7: Preparation of a research protocol.
- Topic 8: Evidence-based dentistry (OBE) and critical reading.
- Topic 9: Systematic review and meta-analysis.

Practice: Analysis and interpretation of data using SPSS:

Practice 1: Cross-sectional study.

Practice 2: Analyzing the confusion and the modification of the effect.

Practice 3: Experimental study.

Practice 4: Cohort and survival study.

Practice 5: Diagnostic tests.

Practice 6: Validation of questionnaires.

2. PUBLICATION AND DISSEMINATION OF RESULTS.

Topic 1: The transfer of scientific-technical information.

Topic 2: Scientific information in health sciences.

Topic 3: Databases in health sciences.

Topic 4: Writing and publication of scientific work.

Topic 5: The bibliographic reference.

Topic 6: Open Access to scientific information.

Topic 7: Evaluation and impact of information sources and scientific literature.

**WORKLOAD**

ACTIVITY	Hours	% To be attended
Theory classes	27,00	100
Computer classroom practice	18,00	100
Classroom practices	15,00	100
Development of group work	20,00	0
Development of individual work	10,00	0
Study and independent work	40,00	0
Readings supplementary material	10,00	0
Preparation of practical classes and problem	10,00	0
TOTAL	150,00	

TEACHING METHODOLOGY**Theoretical classes:**

The theoretical orientation of the teacher, by means of magisterial participative classes close to the recommended bibliography they constitute practices the base of the constructive learning process of the pupil

Practical classes: The practical application of the theoretical contents materializes in the accomplishment of several practices with obligatory character. The works, depending on the content can be realized individually or collectively and are submitted to the calendar of presentation established by the teacher. The use of computers is an important prop in the learning of our aims. Practices are realized in the classroom of computer science for the accomplishment of search of scientific information in databases.

Tutorships: The tutorships constitute a weekly space of meeting and debate between the teacher - student with the aim to solve problems of learning during the course.

EVALUATION

The evaluation is divided into:

1. Theoretical test (50%): it will consist of a continuous evaluation through questionnaires with multiple choice questions. The questionnaires will evaluate theoretical contents of the two main thematic units of the subject: on the one hand research and on the other, publication and dissemination of results. It is a requirement to answer all the questionnaires and obtain at least a 5 in the average of all. The non-completion of the questionnaires will suppose the failure in the continuous evaluation, having to pass a written test consisting of 50 multiple choice questions with 4 possible answers, of the that only one is correct to pass the course.



2. Practical work (50%): It consists of a series of practical exercises on the subject, individually or in groups. This practical work represents a final 50% and is approved with the completion of all the proposed practices, having to obtain at least a 5 on average. It is mandatory to attend a minimum of 80% of the practices and the presentation of the final work of practices consisting of the realization of a scientific poster and a critical reading.

The final mark is obtained by measuring the theoretical mark and the practical mark. It is a requirement to access the advance call for this subject, that the student has successfully completed all of their practices.

La evaluación se divide en:

1. Prueba teórica (50%): consistirá en una evaluación continua a través de la realización de cuestionarios con preguntas tipo test. Los cuestionarios evaluarán contenidos teóricos de las dos grandes unidades temáticas de la asignatura: por un lado investigación y por el otro, publicación y difusión de resultados. Es requisito contestar todos los cuestionarios y obtener al menos un 5 en la media de todos, la no realización de los cuestionarios supondrá el suspenso en la evaluación continua, debiendo superarse una prueba escrita consistente en 50 preguntas tipo test con 5 posibles respuestas, de las que sólo una es correcta para aprobar la asignatura.

2. Trabajo práctico (50%): Consiste en una serie de ejercicios prácticos sobre la materia, de forma individual o en grupo. Este trabajo práctico representa un 50% final y se aprueba con la realización de todas las prácticas propuestas debiendo obtener al menos un 5 de media. Es obligatorio la asistencia a un mínimo del 80% de las prácticas y la presentación de los trabajos finales de prácticas consistentes en la realización de un póster científico y de una lectura crítica.

La nota final se obtiene mediando la nota teórica y la práctica. Es requisito para acceder al adelanto de convocatoria de esta asignatura, que el estudiante haya cursado con aprovechamiento la totalidad de sus prácticas.

Students are reminded of the great importance of carrying out evaluation surveys of all the teaching teachers of this subject.

REFERENCES

Basic

- Argimon Pallás, J. M. a., & Jiménez Villa, J. (2004). Métodos de investigación clínica y epidemiológica. Barcelona: Elsevier
- Cordón García, J. A., Alonso Arévalo, J., Gómez Díaz, R., & López Lucas, J. (2012). Las nuevas fuentes de información: información y búsqueda documental en el contexto de la Web 2.0. Madrid: Pirámide
- Cordón García, J. A., López Lucas, J., & Vaquero Pulido, J. R. (1999). Manual de búsqueda documental y práctica bibliográfica. Madrid: Pirámide.



- Greenhalgh, T. (2000). Cómo interpretar un artículo médico: fundamentos de la medicina basada en la evidencia (1a ed.). Barcelona: Medical Trends.
- López Yepes, J. coord. (2006). Manual de Ciencias de la Documentación. Madrid: Pirámide.
- Martín Vega, A. (1995). Fuentes de información general. Gijón: Trea.
- Ramón Torrell, M. J. (2000). Métodos de investigación en odontología: bases científicas y aplicaciones del diseño de la investigación clínica en las enfermedades dentales. Barcelona: Masson.
- Reyes Gómez, F. de los. (2010). Manual de bibliografía. Madrid: Castalia.
- Villa, J. J., Pallàs, J. M. A., Zurro, a. M., Tarrés, M. V., Argimon, J. M., Jiménez, J., Vilardell, M. (2010). Publicación científica biomédica. Cómo escribir y publicar un artículo de investigación. Barcelona: Elsevier.