

Academic Year: ( 2020 / 2021 )

Review date: 16-11-2020

Department assigned to the subject: Library and Information Sciences Department

Coordinating teacher: GARCIA ZORITA, JOSE CARLOS

Type: Electives ECTS Credits : 6.0

Year : 1 Semester : 0

**OBJECTIVES****BASIC SKILLS**

CB6 Possess and understand knowledge that provides a basis or opportunity to be original in the development and / or application of ideas, often in a research context

CB9 That students know how to communicate their conclusions and the latest knowledge and reasons that support them to specialized and non-specialized audiences in a clear and unambiguous way

CB10 That students possess the learning skills that allow them to continue studying in a way that will be largely self-directed or autonomous.

**GENERAL COMPETENCES**

CG4 To carry out consultancy and technological consultancy tasks for the implementation of basic services for the creation, processing, storage, diffusion and conservation of information in digital format.

CG5 Recognize the growing importance of teamwork in the world of work and demonstrate adaptability and integration in different work environments, maintaining relationships and communication flows.

CG8 To value the rigorous and well-done work, in planning, organizing and developing one's own activities, demonstrating initiative, creativity and sense of responsibility, maintaining interest throughout the process, and feeling personal satisfaction with the results achieved.

CG9 Integrate knowledge, make judgments and communicate their conclusions, as well as the latest knowledge and reasons that support them, to specialized and non-specialized audiences in a clear and unambiguous way.

**RESULTS OF LEARNING**

The student after passing the Course must:

- To know and understand the quantitative aspects of the production and use of information resources.
- Identify and analyze the flow of scientific and technological information. Understand the regularities with which these flows are manifested
- Understand and understand the sociological aspects of scientific and technological communication, search and retrieval of information, as well as the reasons for citation and the flow of information in the Web environment.
- Analyze existing information on the environment of organizations (internal and external), examining how different types of information (patents, markets, etc.) are analyzed and integrated, and how new knowledge is used in decision making.

Traductor de Google para empresas: Google Translator Toolkit Traductor de sitios web Global Market Finder  
Información del Traductor de Google Comunidad Móvil

**DESCRIPTION OF CONTENTS: PROGRAMME**

Specific topics of the course:

**Theory**

- Basic concepts of Informetrics
- informetric Tools: Laws and indicators
- Informetrics' Applications: Cybermetrics, Webmetrics and Social Network Analysis. Other applications (Technological Surveillance and Competitive Intelligence, Datamining and Textmining)

**Practice**

Carrying out practical activities in which data collection and analysis techniques will be applied, based on the use of computer and computing tools.

## LEARNING ACTIVITIES AND METHODOLOGY

### TRAINING ACTIVITIES OF THE STUDY PLAN RELATED TO SUBJECTS

- AF1 Individual work for the study of theoretical and practical materials developed and contributed by the teacher  
AF2 Individual work for problem solving and case studies  
AF3 Theoretical-practical classes  
AF4 Tutorials  
AF5 Group work  
AF6 Active participation in forums enabled by the teacher in the virtual educational platform  
AF7 Perform self-assessment test for content review

| Activity Code | Total hours | in-person total hours | % Student in-person hours |
|---------------|-------------|-----------------------|---------------------------|
| AF1           | 60          | 0                     | 0                         |
| AF2           | 45          | 0                     | 0                         |
| AF3           | 6           | 6                     | 100                       |
| AF4           | 5           | 0                     | 0                         |
| AF5           | 60          | 0                     | 0                         |
| AF6           | 2           | 0                     | 0                         |
| AF7           | 2           | 0                     | 0                         |
| TOTAL         | 180         | 6                     | 3,3                       |

### TEACHING METHODOLOGIES

- MD1 Presentations in the teacher's class with support of computer and audiovisual media, in which the main concepts of the subject are developed and the bibliography is provided to complement the students' learning.  
MD2 Critical reading of texts recommended by the teacher of the subject:  
Press articles, reports, manuals and / or academic articles, either for later discussion in class, or to expand and consolidate the knowledge of the subject.  
MD3 Resolution of practical cases, problems, etc., raised by the teacher individually or in a group  
MD4 Exposition and discussion in class, under the moderation of the professor of subjects related to the content of the subject, as well as of practical cases  
MD5 Preparation of individual and group work and reports  
MD6 Reading of theoretical and practical teaching materials  
Traductor de Google para empresas: Google Translator Toolkit Traductor de sitios web Global Market Finder

## ASSESSMENT SYSTEM

- SE1 Participation in class and forums in virtual educational platform  
SE2 Individual or group work done during the course  
SE3 Carrying out evaluable and scoring questionnaires  
SE4 Exam or Final Work \*  
SE5 Presentation, content and public defense of TFM

\* The final exam will be held in face-to-face mode, at Carlos III University or at a university-sponsored center that guarantees the student's identity, and must pass it in order to pass the corresponding subject / subject.

| EVALUATION SYSTEMS                             | Weighting |
|--|-----------|
| SE1  | 5%        |
| - Participation in activities of the subject   | 5%        |
| SE2  | 30%       |
| - Individual self-assessment practices         | 20%       |
| - Comments and evaluation by pairs of readings | 10%       |
| SE3  | 15%       |
| - Conducting evaluation questionnaires         | 15%       |
| SE4  | 50%       |
| - Final Course Work (in group)                 | 35%       |
| - Final Exam ** (In person)                    | fifteen%  |

\*\* To pass the subject it is necessary to pass this test. Those students who pass the Final Exam, but not the Subject, will retain the qualification obtained for the extraordinary convocation.

## FOLLOW-UP TO CONTINUOUS EVALUATION

It is understood that a student follows the continuous evaluation if, and only if, it meets the following criteria:

- Perform all the evaluation questionnaires (SE3) obtaining in them an average score equal to or greater than 25% of their qualification; Y
- Participate actively in the realization of the Final Work (SE4).

Those students who do not follow the continuous evaluation, will need to be able to surpass the subject, to go to the extraordinary call.

### EXTRAORDINARY CALL:

The extraordinary call of the subject for those students who have not passed, will consist of two parts:

- A task to be delivered in advance that will be worth a maximum of 70% of the final grade of the subject.
- A FINAL EXAM (face-to-face) that will be worth a maximum of 30% of the final grade of the subject.

|   |    |
|---|----|
| <b>% end-of-term-examination:</b>   | 50 |
| <b>% of continuous assessment (assignments, laboratory, practicals...):</b> | 50 |

## BASIC BIBLIOGRAPHY

- \* -, Bar-Ilan, J. (2008) Informetrics at the beginning of the 21st century¿A review. *Journal of Informetrics*, 2, 1¿52.
- \* -, Hood, W.W., Wilson, C.S. (2001). The literature of bibliometrics, scientometrics and informetrics. *Scientometrics*, 52, (2), 291¿314..
- \* -, THELWALL, M.; VAUGHAN, L.; BJORNEBORN, L. (2005).Webometrics. *Annual Review of Information Science and Technology*, vol. 39, pp. 81-135..
- \* -, THELWALL, Mike. (2008). Bibliometrics to Webometrics. *Journal of Information Science*, vol. 34, no. 4, pp. 605-621..
- \* -, Cronin, B. (2000). Strategic intelligence and networked business. *Journal of Information Science*, 26, 133-138..
- \* -, Hand, D., Mannila, H., Smyth, P. (2001). *Principles of data mining*. Cambridge: Massachussetts Institute of Technology..
- \* -, Abrizah, A., Erfanmanesh, M., Rohani, V. A., Thelwall, M., Levitt, J. M., & Didegah, F. (2014). Sixty-four years of informetrics research: Productivity, impact and collaboration. *Scientometrics*, 101(1), 569-585..
- \* -, Egghe, L., & Rousseau, R. (1990). *Introduction to informetrics: Quantitative methods in library, documentation and information science*. Elsevier Science Publishers..
- \* -, Galyavieva, M. S. (2013). On the formation of the concept of informetrics (Review). *Scientific and Technical Information Processing*, 40(2), 89-96.
- \* -, Barnes, C. (2015). The Use of Altmetrics as a Tool for Measuring Research Impact. *Australian Academic & Research Libraries*, 46(2), 121-134..
- \* -, Sharda, R., Delen, D., Turban, E., Aronson, J., & Liang, T. P. (2014). *Businesss Intelligence and Analytics: Systems for Decision Support-(Required)*. Prentice Hall..
- \* -, Mingers, J., & Leydesdorff, L. (2015). A review of theory and practice in scientometrics. *European Journal of Operational Research*, 246(1), 1¿19..
- \* -, Pellissier, R., & Nenzhelele, T. E. (2013). Towards a universal definition of competitive intelligence. *SA Journal of Information Management*, 15(2)..
- \* -, Todeschini, R., & Baccini, A. (2016). *Handbook of bibliometric indicators: quantitative tools for studying and evaluating research*. Weinheim: Wiley-VCH Verlag GmbH & Co.KGaA..