Universidad Zaragoza

Academic Year/course: 2024/25

60455 - Bibliographic resources and databases

Syllabus Information

Academic year: 2024/25
Subject: 60455 - Bibliographic resources and databases
Faculty / School: 100 - Facultad de Ciencias
Degree: 543 - Master's in Molecular Chemistry and Homogeneous Catalysis
ECTS: 2.0
Year: 1
Semester: First semester
Subject type: Optional
Module:

1. General information

The objective of the subject is for the student to develop search skills in both general and specific bibliographic resources and to acquire the necessary skills to carry out future searches autonomously. This is one of the basic approaches highlighted by the European Higher Education Area.

2. Learning results

1. To know how to access and manage the different types of bibliographic resources available.

2. To know how to plan a bibliographic search on specific research topics, selecting the appropriate scientific database.

To know how to analyse and classify the information obtained in order to distinguish what is most useful in each case.

4. To know how to use easily accessible bibliographic managers to organize information.

In summary, the development of new technologies and the ease of publication on the Internet, together with the large amount of information available, make it essential to resort to sources that guarantee, through previous selection processes, the retrieval of reliable and quality information such as that found in catalogues or databases.

3. Syllabus

Topic 1. Where to find reliable information**.** Data, information and knowledge. Information competencies. Sources of information: typology and location. Assessment of information resources.

Topic 2. Ethical use of information: citation and bibliography**.** Ethics and intellectual property. Academic work without plagiarism. Create citations and bibliographic references. How to present and order bibliographic references. Computer programs for citation and bibliography management.

Topic 3. Information retrieval in electronic environments: general resources. Basic concepts. Processes in the search for electronic information. Multidisciplinary databases. Library catalogues. Bibliographic databases: ISI products, Scopus, Science Direct. Internet search tools.

Topic 4. Information retrieval in electronic environments: specialized resources**.** Chemistry-specific portals and databases: Beilstein, Gmelin, Scifinder, etc. Publishers' own databases: RSC, ACS, Wiley, Springer, Elsevier, etc. Crystallographic databases: CSD, ICSD. Patents. Selection of resources on the Web.

Topic 5. Bibliographic managers. Description and use. Mendeley, Endnoteweb and Refworks.

4. Academic activities

Expository-participative classes (0.8 ECTS)

Problem solving (0.4 ECTS)

Computer practice (0.8 ECTS)

Small group or personalized tutoring.

5. Assessment system

A continuous assessment process will be followed in accordance with the work directed by the teachers in which the following will be considered:

1. Formative evaluation by topics based on proposed exercises that measure the gradual acquisition of theoretical knowledge (20%).

2. Written test that will consist of a series of exercises that include the use of any of the databases covered throughout the term and will be carried out at the end of the class period (80%).

For those students who have not passed the subject or wish to improve their grade, there will be a global test in the two official

calls. This test will consist of the presentation of the required information in different global exercises that need the management of the databases used throughout the term in a critical way.

The enrolment in the subject entitles the student to 2 official exam calls per enrolment. The performance of the exams and the number of official calls will be in accordance with the Rules of Permanence in Master Studies and the Rules of Learning Assessment Standards of the Faculty of Sciences (https://ciencias.unizar.es/normativas-asuntos-academicos).

6. Sustainable Development Goals

4 - Quality Education
10 - Reduction of Inequalities