ENG-619

Information literacy for chemists

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Cursus	Sem.	Type
Chemistry and Chemical Engineering		Opt.

Language of teaching	English
Credits	1
Session	
Exam	Project report
Workload	30h
Hours	**20**
Courses	11
Exercises	4
TP	5
Number of positions	**24**

Frequency

Every year

Remark

Next time Fall 26

Summary

Concepts and tools to understand and use the modem chemical information environment Learn how to explore the scientific literature, how to use the information found in agreement with intellectual property laws, and learn about the current trends impacting chemists as creators of knowledge.

Content

Searching for information (8hrs)
- Theoretical bases: scientific information as a network, elementary information retrieval
- Overview of information sources: articles, book, patents, reports, theses, databases, search engines ...
- Tools for text- and structure-based searching: Web of Science, Google Scholar, Scifinder, Reaxys, CSD, Pubchem ..
- Design of search strategies for one's PhD project

Using information (3h)
- Intellectual property law basics: copyright laws, patents
- Licenses
- Best practices of citation, plagiarism prevention

Producing information (4h)
- Visibilily and impact: introduction to bibliometrics and altmetrics
- The evolving market of scientific information: Open Access, publishing agreements, institutional policies, authorship
- Data and metadata publishing: supplementary information for the 21st century
- Science on social networks

Keywords

Bibliographie databases, Chemical information, Smart publishing, Search strategies

Learning Outcomes

By the end of the course, the student must be able to:

• Formulate a search strategy for his/her own PhD project (lool selection, search query design, literature monitoring)

• Work out / Determine the consequences of intellectual property laws for the re-use of scientific information and scientific content

• Discuss the importance of the presented concepts

Assessment methods

Project report

Resources

Bibliography

- Currano, J. Chemical Information for Chemists': A Primer, RSC: Cambridge, 2014.
- selected articles and book chapters

Ressources en bibliothèque

- Find the references at the Library