

Information Literacy for Supporting Education at the Warsaw University of Technology

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ABSTRACT

By 2013, all Polish universities will have to comply with the National Qualification Framework of the Ministry of Science and Higher Education related to, among others, new competences in Information Literacy in accordance with the principles of the Bologna Process. This process is currently being implemented also by the Warsaw University of Technology (WUT).

The authors present their experiences in creating and implementing blended learning program in Information Literacy in the last year at several departments of WUT.



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INTRODUCTION

Universities around the world have been implementing information competences into curricula for many years now.

In Europe, the Bologna Process introduced requirements for information competences in universities. These requirements are currently being implemented under the National Framework for Qualifications in various European countries, including Poland.

Introduction of Information Literacy into the curriculum requires collaborative efforts of the university authorities, faculty staff and librarians. Academic librarians offer a wide variety of educational services, traditional instructions, lectures, workshops and e-learning, addressed to the entire academic community.

By 2013, all Polish universities will have to comply with the National Qualification Framework of the Ministry of Science and Higher Education related to, among others, new competences in Information Literacy in accordance with the principles of the Bologna Process.

Information Literacy Competency Standards for Higher Education are:

- Evaluate information and its sources critically
- Incorporate selected information into one's knowledge base
- Use information effectively to accomplish a specific purpose
- Understand the economic, legal, and social issues surrounding the use of information, and access and use information ethically and legally

The process is currently being implemented also by the Warsaw University of Technology (WUT).

The WUT Main Library has put in a lot of effort into making Information Literacy as a part of the curriculum. The Information Literacy syllabus was developed by the librarians and was then implemented by several WUT faculties as a part of curriculum.

METHODS AND FORMS

Methods and forms of library training have undergone changes, ranging from traditional lectures through computer workshops, to using e-learning at present.

Cooperation between the WUT and the Main Library in different levels are:

- only facultative/optional courses or workshops on an individual basis
- both credit courses in the curriculum and optional type of courses
- IL workshops with or without assessment integrated within larger methodological courses

E- Learning on the ML Moodle Platform:

1. E-courses (require log in):
 - "RefWorks" addressed to all types of university users
 - "Chemistry" addressed to the faculties of chemistry, chemical engineering, materials engineering, biotechnology and other related users.
2. Online presentations, general and advanced (Open Access, CC Licence):
 - "The Library Step by Step" – designed for all new students
 - "Indicators for Evaluating the Scientific Output" (general) based on WoS, Scopus, IF databases – designed for the WUT research staff and PhD students. It concerns research-assessment methodology that is based on total citations accumulated from all publications associated with a specific university during the period of survey.
 - "SciFinder" (advanced) – addressed to chemistry, chemical engineering, materials engineering, biotechnology and other related users. It includes the review of all parts of SciFinder database and help on building the search strategy.
 - Training for WUT librarians (several presentations) – addressed to all WUT librarian

SYLLABUS

Name of course/subject: Introducing to Information Literacy: Scientific and Patent Information	Bachelor' degree
	obligatory
Teacher	AnnaTonakiewicz-Kolosowska; Iwona Socik
Form of credits	Assignments, online tests,
No. of hours: 30	ECTS: 1
Methods and forms	Lectures, workshops, e-courses
Aims and objectives	The course aims are: 1. To acquaint students with the WUT Main Library resources, including both printed and electronic resources and Internet resources. 2. To teach how to build a search strategy for literature in databases. 3. To help to manage scientific information from various sources. 4. To present the principles of preparing footnotes, citations and references. 5. To introduce the regulations concerning intellectual and industrial property and review patent's databases. 6. To present the principles of making a proper assessment and selection of search results and applying them in a scientific work.
Curriculum contents	1. General information on information resources. 2. Types of information sources. 3. Electronic sources of scientific information. 4. Library computer catalogues. 5. Central Catalogues - Polish and international. 6. Scientific information resources on the Internet. 7. Open Access Knowledge. 8. Bibliographic databases (national - and worldwide). 9. Intellectual property - legal environment.
Learning outcomes	knowledge: 1. Student has knowledge about the different function of scientific information, sources selection, and knows how to collect, store and distribute information. 2. Student has an elementary knowledge of the protection of intellectual property and patent law. skills: 1. Student can retrieve information from the literature concerning the civil engineering, databases, and other properly selected sources, also in a foreign languages. 2. Student can prepare and deliver a documented oral presentation on the issues related to construction and civil engineering. social competences: 1. Student draws conclusions and describes his/her own results. 2. Student is communicative and can use multimedia tools. 3. Student applies the rules of professional code ethics.



User groups	Number of users	
	„RefWorks”	„Chemistry”
Graduate students	341	311
PhD students	143	-
Faculty staff	80	-

Table 1. E-learning in figures 2011/2012

User groups	Number of users
First year students	3750
Graduate students	921
PhD students	622
WUT librarians	78
Faculty staff	125

Table 2. Training in figures 2011/2012

OUTCOMES

Undergraduate Bachelor Studies

obligatory on demand	library training	lecture / online presentation / films	all faculties
obligatory a credit given course in the curriculum	„Science and Patent Information” ³	lectures / e-course ¹ ; 30 hours / 4 years	Faculty of Civil Engineering

Graduate Masters Studies

obligatory with assesment integrated larger methodological course	as complemented the subject "Designing Technological Processes"	workshops / lectures / e-courses ^{1,2}	Faculty of Chemistry
obligatory as a curriculum with assesment integrated larger methodological course	„Information Literacy” with librarians supporting	workshops / lectures / e-courses ^{1,2}	Faculty of Chemical and Process Engineering

Postgraduate Doctorate Studies

obligatory as a curriculum	„Information Literacy”	lectures / e-course ^{1/4} hours	Teacher Training Department
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¹ RefWorks e-course
² Chemistry e-course

CONCLUSIONS

The Bologna Process, now being implemented in the Polish universities, has greatly intensified the IL related activities of academic libraries. This increased activity is caused mostly by the necessity of including information competencies into the university curricula, according to the National Quality Framework (NQF).

The Warsaw University of Technology has developed new curricula for undergraduate studies in which IL as a subject conducted by librarians has been implemented only by one WUT faculty. The librarians will run the course (starting October 2012) during 7 semesters, using both traditional and e-learning methods. In order to develop new opportunities for introducing IL into other faculties at all levels of study, the librarians need to design different forms of e-learning.

These new forms of teaching are now breaking down the barriers in the WUT faculties, particularly financial barriers, which are one of the obstacles in implementing IL conducted by librarians. Another problem is also low awareness of the significant role of IL in teaching and learning processes among the faculty. Therefore, it is necessary to address this particular group of users and offer e-courses on IL, so that in future, they themselves or in cooperation with librarians could develop skills and knowledge in this area.

REFERENCES

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