

Course Outline

1) General

SCHOOL	SCIENCE		
DEPARTMENT	CHEMISTRY		
DEGREE	MASTER		
COURSE CODE	18ΔΕ	SEMESTER	3
COURSE TITLE	Literature survey and oral presentation on the research topic of the thesis. Research methodology		
INDEPENDENT TEACHING ACTIVITIES in the case that the credits are awarded to separate parts of the course e.g. Lectures, Laboratory Exercises, etc. If the credits are awarded uniformly for the entire course, enter the weekly teaching hours and total credits		TEACHING HOURS PER WEEK	CREDITS
Bibliographic search		7	10
<i>Add lines if necessary. The teaching organization and methods used are described in detail in (d).</i>			
COURSE TYPE <i>general background, special background, general knowledge specialization, skill development</i>	SPECIAL BACKGROUND, SKILL DEVELOPMENT		
PREREQUISITE COURSES:	NO		
COURSE AND EXAM LANGUAGE:	GREEK		
IS THE COURSE OFFERED TO ERASMUS STUDENTS ?	IF NEEDED YES		
COURSE WEBSITE (URL)	https://eclass.uoa.gr/courses/CHEM327/		

(1) LEARNING OUTCOMES

LEARNING OUTCOMES

The learning outcomes, specific knowledge, skills and abilities of an appropriate level that the students will acquire after the successful completion of the course are described.

Consult Appendix A

- *Description of the Level of Learning Outcomes for each course of study according to the Qualifications Framework of the European Higher Education Area*
- *Descriptive Indicators for Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning and Annex B*
- *Comprehensive Guide to writing Learning Outcomes*

The aim of the course is to disseminate knowledge and develop skills on the literature research methodology and coverage through the electronic on line resources of the NKUA (HEALINK, Scopus, WOS, etc.). To this end, the following tasks are taking place: Bibliographic review of the topic of the Postgraduate Diploma Thesis (PDT) of each postgraduate student; critical report writing of the results of the literature research; oral presentation of their results. Throughout this exercise, students are guided by their supervisors and present in front of the teaching staff and students of the Postgraduate Program.

More specifically, in the context of this course, students are taught:

- the ways in which literature research is carried out (searching for books, original scientific articles and review articles, doctoral theses, patent diplomas, etc.).
- the leverage the Cambridge crystallographic database to identify crystal structures in the literature.
- to deal with cutting-edge research topics, which focus on areas of strong scientific or technological interest.
- the ways of the presentation and discussion of research results in the meetings of the research groups
- to write a scientific publication through the critical reading of the literature.
- the rules of ethics and research ethics

Cognizance outcomes

- Comprehension and understanding of research methodology.
- Comprehension and understanding of the theoretical background before carrying out the experimental work.
- Comprehension and understanding of the use of the Cambridge crystallographic database, its capabilities and applications.
- Knowledge and understanding of academic and research ethics

Skills

- Skill in literature search (books, original articles and review articles, patents, etc.).
- Skill in using the Cambridge crystallographic database.
- Skill in critical presentation of bibliographic data
- Skill in applying ethics and morality (avoid copying etc.)

Abilities

- Ability to review the literature of a research topic.
- Ability in the synthetic presentation of a large volume of bibliographic data
- Ability to critically evaluate bibliographic data
- Ability to present while avoiding duplication
- Ability to identify and attribute information sources.

General Skills

Taking into account the general skills that the graduate must have acquired (as stated in the Diploma Appendix and listed below) which of the following is/are the course aimed at?.

Research, analysis and synthesis of data and information, using the necessary technologies
Adaptation to new situations
Decision making

Project planning and management
Respect for diversity and multiculturalism
Respect for the environment
Demonstrating social, professional and ethical responsibility

<i>Independent work</i> <i>Teamwork</i> <i>Working in an international environment</i> <i>Working in an interdisciplinary environment</i> <i>Generating new research ideas</i>	<i>and sensitivity to gender issues</i> <i>Exercise criticism and self-criticism</i> <i>Promotion of free, creative and inductive thinking</i> <i>Other.....</i>
<p>The course aims at equipping students with the following general skills:</p> <ul style="list-style-type: none"> • Search, analysis and synthesis of data and information, using the necessary databases and technologies. • Writing a scientific review. • Autonomous work. • Adherence to academic ethics and ethics. 	

(2) COURSE CONTENT

The content is related to and depends on the research topic of the experimental part of the thesis.

(3) TEACHING AND LEARNING METHODS – EVALUATION

<p>LECTURES' DELIVERY <i>In person, distance, etc..</i></p>	<p>In person, collaboration with research team members, email communication.</p>	
<p>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGIES <i>Use of I.C. T. in Lectures, Laboratory Exercises, Communication with students</i></p>	<p>In Teaching:</p> <ul style="list-style-type: none"> • Databases • Appropriate software for writing a paper • Presentations with multimedia content (power point). <p>In Communication with students:</p> <ul style="list-style-type: none"> • Email. • Presentations with multimedia content (power point). 	
<p>TEACHING ORGANIZATION <i>The teaching style and methods are described in detail.</i> <i>Lectures, Seminars, Laboratory Exercises, Field Exercises, Literature Study & Analysis, Tutorial, Internship (Placement), Clinical Exercises, Art Workshop, Interactive Teaching, Educational Visits, Study Preparation (Project), PaperWriting Assignments, Artistic Creation, etc. etc.</i></p> <p><i>The student's study hours for each learning activity as well as unguided study hours according to ECTS principles are listed</i></p>	<p>Activity</p>	<p>Semester workload</p>
	<p>Collaboration with the Supervisor of MSc Thesis</p>	<p>30</p>
	<p>Independent literature research</p>	<p>80</p>
	<p>Project writing and Presentation</p>	<p>140</p>
	<p>total</p>	<p>250</p>
<p>STUDENT EVALUATION <i>Description of the evaluation process</i></p> <p><i>Assessment Language, Assessment Methods, Formative or Deductive, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Report / Report, Oral Examination, Public Presentation, Laboratory Work, Clinical Patient Examination, Artistic Interpretation, Other / Others</i></p> <p><i>Explicitly defined evaluation criteria are mentioned, and if and where they are accessible by students.</i></p>	<p>The evaluation of the course takes place in Greek and includes:</p> <ul style="list-style-type: none"> • evaluation of the bibliographic work and its presentation 	

(4) RECOMMENDED BIBLIOGRAPHY

- <https://www.ccdc.cam.ac.uk/Community/educationalresources/>
- Books, scientific articles, etc., which are related to the respective research topic.