

COURSE OUTLINE

(1) GENERAL

SCHOOL	SCHOOL OF SCIENCES		
DEPARTMENT	DEPARTMENT OF CHEMISTRY		
LEVEL OF STUDIES	ISCED level 6 – Bachelor's or equivalent level		
COURSE CODE	YN602	SEMESTER	6 th Semester
COURSE TITLE	Research Seminar		
TEACHING ACTIVITIES <i>If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.</i>		TEACHING HOURS PER WEEK	ECTS CREDITS
LABORATORY EXERCISES		5	5
Please, add lines if necessary. Teaching methods and organization of the course are described in section 4.			
COURSE TYPE <i>Background, General Knowledge, Scientific Area, Skill Development</i>	General Background		
PREREQUISITES:	NO		
TEACHING & EXAMINATION LANGUAGE:	Greek		
COURSE OFFERED TO ERASMUS STUDENTS:	NO		
COURSE URL:	https://eclass2.emt.duth.gr/courses/CHEM_G101/		

(2) LEARNING OUTCOMES

Learning Outcomes <i>Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</i>	
Upon successful completion of this course, students will: • Conduct applied research in areas related to the Department's disciplines. • Investigate and address professional problems using appropriate methodologies. • Analyze and interpret experimental results and draw evidence-based conclusions. • Organize and deliver presentations effectively and communicate with diverse audiences.	
General Skills <i>Name the desirable general skills upon successful completion of the module</i>	
<i>Search, analysis and synthesis of data and information,</i> <i>ICT Use</i> <i>Adaptation to new situations</i> <i>Decision making</i> <i>Autonomous work</i> <i>Teamwork</i> <i>Working in an international environment</i> <i>Working in an interdisciplinary environment</i> <i>Production of new research ideas</i>	<i>Project design and management</i> <i>Equity and Inclusion</i> <i>Respect for the natural environment</i> <i>Sustainability</i> <i>Demonstration of social, professional and moral responsibility and sensitivity to gender issues</i> <i>Critical thinking</i> <i>Promoting free, creative and inductive reasoning</i>
Search, analysis and synthesis of data and information, using the necessary technologies, Autonomous work, Working in an international environment	

(3) COURSE CONTENT

The aim of the course is to educate and motivate students to utilize the knowledge and experience they have acquired throughout their studies in conducting applied research on topics directly related to the Department's fields of study. Students are introduced to research directions in Chemistry, research techniques, and broader issues of research methodology and practice. At the same time, students gain experience in investigating and addressing various problems that may arise in the course of their professional practice. Under the guidance of the course instructors, students work in groups of 5–7 members. The extensive hands-on use of research equipment further develops students' experimental skills and laboratory techniques. Students learn how to interpret experimental results and draw conclusions from their own experiments. Finally, the presentation of research findings helps students develop skills in organizing and delivering presentations and effectively communicating with an audience. The course also includes seminars delivered by faculty members who wish to present proposed scientific areas for diploma thesis projects, as well as seminars aimed at developing students' transferable skills, such as scientific writing and scientific presentations. Attendance at all course seminars is mandatory for all students.

(4) LEARNING & TEACHING METHODS - EVALUATION

TEACHING METHOD <i>Face to face, Distance learning, etc.</i>	Face to face	
USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) <i>Use of ICT in Teaching, in Laboratory Education, in Communication with students</i>	• Organization of the material in ppt slides. • Support of the learning process through the electronic platform	
TEACHING ORGANIZATION <i>The ways and methods of teaching are described in detail.</i> <i>Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study / creation, project, creation, project. Etc.</i> <i>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards.</i>	Activity	Workload/semester
	Laboratory exercises	65
	Project	60
	Total	125
STUDENT EVALUATION <i>Description of the evaluation process</i> <i>Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others</i> <i>Please indicate all relevant information about the course assessment and how students are informed</i>	Student assessment is based on a research project, which includes: 1. A written report presenting the research findings and conclusions. 2. An oral presentation of the project.	

(5) SUGGESTED BIBLIOGRAPHY

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