UNIVERSITY OF PATRAS
SCHOOL OF HEALTH SCIENCES
DEPARTMENT OF PHARMACY
POSTGRADUATE PROGRAM: NANOMEDICINES FOR DRUG DELIVERY- NANOMED (EMJMD)

 COURSE TITLE:6-MONTH DIPLOMA THESIS
CODE:HG4_NM12

NANOMEDICINES FOR DRUG DELIVERY- NANOMED (EMJMD)
COURSE OUTLINE

1. GENERAL

SCHOOL	HEALTH SCIENCES
ACADEMIC UNIT	DEPARTMENT OF PHARMACY
PARTICIPATING INSTITUTIONS	-
TITLE of POSTGRADUATE PROGRAM	NANOMEDICINES FOR DRUG DELIVERY- NANOMED (EMJMD)
LEVEL	POSTGRADUATE
COURSE CODE HG4_NM12	**SEMESTER** D'
COURSE TITLE	**6-MONTH DIPLOMA THESIS**

INDEPENDENT TEACHING ACTIVITIES	WEEKLY TEACHING HOURS	CREDITS
6 MONTH INTERNSHIP	20	30

COURSE TYPE	Specialized knowledge, Skills Development.
PREREQUISITE COURSES	PREVIOUS COURSES
LANGUAGE of INSTRUCTION and EXAMINATIONS	ENGLISH
COURSE OFFERED to ERASMUS STUDENTS	THIS IS ALREADY AN EMJMD PROGRAM COURSE
COUSRSE (URL)	https://www.pharmacy.upatras.gr/images/DS/NanoMed/HG4_NM12.pdf

2. LEARNING OUTCOMES

Learning Outcomes
Upon successful course completion, students will acquire knowledge, skills and abilities related to level 7 of the European Qualifications Framework for Lifelong Learning. In particular, students will: 1. understand the strategy and logic of literature searching before and during research project execution 2. have been introduced to the techniques and methodology aaplied in their specific topic 3. have understood the basic approaches for carrying out a complete research project 4. have familiarized themselves with the methods followed to adapt specific techniques in order to answer specific questions they have during their lab work

5. They will be able to understand the approaches they have to follow in order to conduct a complete study on a specific topic.

General Competences
• Search for, analysis and synthesis of data and information, with the use of the necessary technology • Working independently • Team Work • Decision-making • Working in an international environment • Working in an interdisciplinary environment • Production of free, creative and inductive thinking • Adapting to new situations

3. SYLLABUS

Literature Search

Setup of Methodologies, Techniques, Procedures, Protocols

Test Methods and Protocols for verification

Carry out Experimental work

Analyze Experimental Results

Write Report

Defend thesis during the yearly Workshop

PUBLIC PRESENTATIONS
Selected case studies in modern drug discovery.
Individual Assignment & Presentation

4. TEACHING and LEARNING METHODS - EVALUATION

DELIVERY	Face to face
USE of INFORMATION and COMMUNICATIONS TECHNOLOGY	• Use of ICT - e-class platform • Communication with students
TEACHING METHODS	*Activity* *Semester Workload* Self Study –Literature Search 100 Experiment execution 500 Analysis of Results 50 Writing Report 100 Oral presentation *Course Total* **(25 hours of work-load per ECTS credit)** **750**

STUDENT PERFORMANCE EVALUATION	Language of Evaluation: English
	Supervisor's Mark (50 % of total)
	Written Report mark from committee
	(30% of final grade)
	Public Presentation
	• Defense of Diploma Thesis to committee (English) (20% of final grade)

5.   RECOMMENDED BIBLIOGRAPHY

Suggested Bibliography:
1. Nanomedicine for the Treatment of Disease: From Concept to Application. (2019). United States: Apple Academic Press.
2. Advances and Challenges in Nanomedicine. (2019). (n.p.): Frontiers Media SA.
3. Nanomedicine for Bioactives: Healthcare Applications. (2020). Singapore: Springer Nature Singapore.
4. Igarashi, E. (2018). Nanomedicines and Nanoproducts: Applications, Disposition, and Toxicology in the Human Body. United States: CRC Press.
5. Gregoriadis, G. (2018). Liposome Technology: Volume III: Targeted Drug Delivery and Biological Interaction. United Kingdom: CRC Press.
6. Liposomes: Methods and Protocols. (2023). Germany: SPRINGER-VERLAG NEW YORK.
7. Liposomes in Drug Delivery: What, Where, How and When to Deliver. (2024). United Kingdom: Elsevier Science.
8. Grumezescu, A. M. (2019). Nanomaterials for Drug Delivery and Therapy. Netherlands: Elsevier Science.

And others depending on the topic of the Thesis

Related Academic Journals:
Nature Nanotechnology
J, Controlled Release
ACS Nano
Inter. J. Pharmaceutics
J. Pharm. Sciences
J. Liposome Research
Nanomedicine
Int. J. Nanomedicines
Pharmaceutics
And others depending on the topic of the Thesis