COURSE OUTLINE

(1) GENERAL

SCHOOL	**of MEDICINE**		
DEPARTMENT			
LEVEL OF STUDY	**POSTGRADUATE**		
COURSE CODE	**TAO - 301**	**SEMESTER OF STUDY**	**3**
COURSE TITLE	**INTERDISCIPLINARY MODULES**		

INDEPENDENT TEACHING ACTIVITIES *in case the credits are awarded to distinct parts of the course e.g. lectures, laboratory exercises, etc. If the credits are awarded uniformly for the entire course, indicate the weekly teaching hours and the total credits*	**TEACHING WEEKS**	**CREDITS**
Lectures	20	30
Add rows if needed. The teaching organization and teaching methods used are described in detail in (d).		

COURSE TYPE *general background, specific background, specialization, general knowledge, skills development*	Special background
PREREQUISITE COURSES:	None
LANGUAGE OF INSTRUCTION AND EXAMINATIONS:	English
THE COURSE IS OFFERED TO ERASMUS STUDENTS	YES
COURSE WEBSITE (URL)	

(2) LEARNING OUTCOMES

Learning Outcomes

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

Consult Appendix A

- *Description of the Level of Learning Outcomes for each cycle of study according to the Qualifications Framework of the European Higher Education Area*
- *Descriptors of Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning and Annex B*
- *Learning Outcomes Writing Summary Guide*

Upon successful completion of the course, students will be able to:

- Know the basic principles governing the subjects of the modules they will choose.
- Be familiar with the interdisciplinary nature of the topics to be addressed.

- To discuss and work on issues the management of which requires knowledge and skills of more than one subject
- Be able to autonomously describe and solve problems in cutting-edge areas of perspective that require an interdisciplinary approach

The course according to the European Lifelong Learning Qualifications Framework is level 7 as a second cycle course.

General Competencies

Taking into account the general competencies that the graduate must have acquired (as listed in the Diploma Supplement and listed below), which of them does the course aim at?.

Search, analyze and synthesize data and information, using the necessary technologies	*Project planning and management*
Adapting to new situations	*Respect for diversity and multiculturalism*
Decision-making	*Respect for the natural environment*
Autonomous work	*Demonstrate social, professional and ethical responsibility and sensitivity to gender issues*
Teamwork	*Criticism and self-criticism*
Working in an international environment	*Promoting free, creative and inductive thinking*
Working in an interdisciplinary environment	*……*
Generation of new research ideas	*Other...*
	…….

- Addressing complex cross-disciplinary visual problems
- Collaboration with scientists in more than one discipline to solve problems
- Development of interdisciplinary thinking
- Use of the university library and multiple bibliographic sources
- Search resources, simulations and online courses
- Create notes and autonomous study method
- Implementation of research projects
- Management of time and deadlines
- Development of the ability to summarize concepts

(3) COURSE CONTENT

Each student is asked to choose 4 modules from the following offered:

Section 1: Monitoring the signal in the optical pathway: from photons to vision

Module that aims to understand and familiarize with the neurophysiology of vision and the technologies that support it. Collaborate Medical School UC, FORTH.

Section 2: Refractive errors: correction by interfering with the visual elements of the eye
Module aimed at understanding and familiarizing with the use of physiological optics and related technologies for the therapeutic modification of the visual properties of the eye. Collaborating Medical School of UC, FORTH, DMSE.

Section 3: Slow release of drugs for ophthalmological use

Module aimed at understanding and familiarization with Ophthalmic pharmacology and techniques that allow development of slow-release drugs. Collaborate Medical School of UC, DMSE.

4th session: New technologies in ophthalmic oncology

Module aimed at understanding and familiarizing with the applications of radiation physics in ophthalmic oncology. Collaborate Medical School UC, FORTH, MUC.

5th session: New ophthalmic imaging technologies Module that aims to understand and familiarize with modern imaging technologies with application in ophthalmology and vision sciences. Collaborating Medical School of UC, FORTH, DMSE. Each module includes lectures, participation in exercises and project presentation.

(4) TEACHING AND LEARNING METHODS - ASSESSMENT

<table>
<tr><td>DELIVERY
METHOD Face to face, Distance learning, etc.</td><td>Face to face</td></tr>
<tr><td>USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES
Use of ICT in Teaching, Laboratory Training, Communication with students</td><td>• Use slides
• View videos with demonstration and/or comprehension experiments.
• Use of an asynchronous e-learning platform where the following are provided:
  ○ Bibliography of the course
  ○ Slides of the course
  ○ Self-study question quiz
  ○ Lecture videos
• Communication through the e-learn platform, use of the possibility of discussion space with topics, emails as well as fixed office hours that have been announced</td></tr>
<tr><td>TEACHING ORGANIZATION
The method and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliography Study & Analysis, Tutorial, Internship (Placement), Clinical Practicing, Art Workshop, Interactive Teaching, Educational visits, Project Writing, Writing a project / assignments, Artistic creation, etc.

The student's study hours for each learning activity as well as the hours of unguided study according to ECTS principles are listed</td><td>
<table>
<tr><th>Activity</th><th>Semester Workload</th></tr>
<tr><td>Lectures</td><td>200</td></tr>
<tr><td>Tasks/Project</td><td>120</td></tr>
<tr><td>Guided Study (office hours)</td><td>100</td></tr>
<tr><td>The Unguided Study</td><td>240</td></tr>
<tr><td></td><td></td></tr>
<tr><td>Total Course</td><td>700</td></tr>
</table>
</td></tr>
<tr><td>STUDENT EVALUATION
Description of the evaluation process

Assessment Language, Assessment Methods, Formative or Summative, Multiple Choice</td><td>Assessment language: English
The final grade results from

The grade of the final exam: 80%

The grade of work: 20%</td></tr>
</table>

Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay/Report, Oral Examination, Public Presentation, Laboratory Work, Clinical Examination of a Patient, Artistic Interpretation, Other/Others *Explicitly defined evaluation criteria and whether and where they are accessible to students are mentioned.*	

(5) RECOMMENDED-BIBLIOGRAPHY

Bibliography • *Depending on the content of the interdisciplinary modules*