COURSE OUTLINE

(1) GENERAL

SCHOOL	**of MEDICINE**		
SECTION			
LEVEL OF STUDY	**POSTGRADUATE**		
COURSE CODE	**TAO - 201**	**SEMESTER OF STUDY**	**2**
COURSE TITLE	**EYE AND VISION II**		

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	4	6
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*	General 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: • Understand the pathophysiology of the human eye and know basic approaches to diagnosis and treatment of eye and vision problems • Know the main intraocular neoplasias and how they are treated

- Know basic concepts of pharmacology and their applications in eye diseases
- Understand different ways of assessing visual function
- Be able to autonomously describe and resolve complex questions related to the above issues.

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...*
	…….

- Troubleshoot complex problems
- Development of scientific 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

1. **Pathophysiology of the eye**

   Common eye diseases: Diseases of the anterior half of the eye (diseases of the eyelids, cornea, lens, iris, ciliary body and refractive abnormalities), diseases of the posterior half of the eye (diseases of the vitreous, retina, choroid/uvea and genetically inherited diseases), systemic diseases with significant ophthalmological alterations and genetically inherited diseases, diseases of the optic nerve and optic tract. Basic principles of ophthalmic surgery for the treatment of diseases of the anterior and posterior segment.

2. **Neoplasms of the eye and basic principles of radiotherapy**

   Intraocular neoplasms, types of neoplasms and categorization. Imaging, diagnosis and modern therapeutic approaches. Choroidal melanoma: Pathophysiology/histology, differential diagnosis and treatment methods. Definition of radiobiology/radiotherapy. Interaction of ionizing radiation with biological targets. Procedure and applications in the performance of radiotherapy for intraocular tumors with emphasis on choroidal melanoma.

3. **Basic principles of pharmacology, ophthalmic therapeutics and surgery**
   Introduction to pharmacology and drug classes. Pharmacokinetics/pharmacodynamics. Classes of drugs and how they work in eye diseases. Development of new drugs for the treatment of eye diseases and modern challenges in intraocular pharmacokinetics/pharmacodynamics. Modern challenges in intraocular drug administration.

4. **Visual function assessment methods**
   Introduction to refraction and optotypes. Visual fields, color vision test, electrophysiological control of retinal function and visual pathway, psychophysical tests to assess visual function

(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>36 (18 x 2)</td></tr>
<tr><td>Tasks/Project</td><td>20</td></tr>
<tr><td>Guided Study (office hours)</td><td></td></tr>
<tr><td>The Unguided Study</td><td>90 (3 hours study/lecture during the semester and 2 hours study/lecture revision for the final exams)</td></tr>
<tr><td></td><td></td></tr>
<tr><td>Total Course</td><td>146</td></tr>
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STUDENT EVALUATION *Description of the evaluation process* *Assessment Language, Assessment Methods, Formative or Summative, Multiple Choice 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.*	Assessment language: English The final grade is derived from the grade of the final written examination (100%).

(5) RECOMMENDED-BIBLIOGRAPHY

Bibliography

- Course presentations
- **Ophthalmology: An Illustrated Colour Text 4th Edition** by Mark Batterbury Bsc FRCS FRCOphth and Conor Murphy MMedSc FRCSI FRCOphth PhD