

## COURSE OUTLINE

### (1) GENERAL

<b>SCHOOL</b>	HEALTH & CARE SCIENCES		
<b>ACADEMIC UNIT</b>	BIOMEDICAL SCIENCES		
<b>DIVISION</b>	OPTICS AND OPTOMETRY		
<b>LEVEL OF STUDIES</b>	UNDERGRADUATE		
<b>COURSE CODE</b>	7011-7012	<b>SEMESTER</b>	7th
<b>COURSE TITLE</b>	SPECIAL OPTOMETRIC INVESTIGATIVE TECHNIQUES		
<b>INDEPENDENT TEACHING ACTIVITIES</b>		<b>WEEKLY TEACHING HOURS</b>	<b>CREDITS</b>
<i>if credits are awarded for separate components of the course, e.g. lectures, laboratory exercises, etc. If the credits are awarded for the whole of the course, give the weekly teaching hours and the total credits</i>			
Lectures + Laboratory Exercises		(4 + 2)	7
<i>Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail at (d).</i>			
<b>COURSE TYPE</b>	<i>Specialised knowledge, skills development</i>		
<i>general background, special background, specialised general knowledge, skills development</i>			
<b>PREREQUISITE COURSES:</b>	6011 -6012 CLINICAL OPTOMETRY		
<b>LANGUAGE OF INSTRUCTION and EXAMINATIONS:</b>	GREEK		
<b>IS THE COURSE OFFERED TO ERASMUS STUDENTS</b>	NO		
<b>COURSE WEBSITE (URL)</b>	..		

### (2) LEARNING OUTCOMES

<p><b>Learning outcomes</b></p> <p><i>The course learning outcomes, specific knowledge, skills and competences of an appropriate level, which the students will acquire with the successful completion of the course are described. Consult Appendix A</i></p> <ul style="list-style-type: none"> <li>• <i>Description of the level of learning outcomes for each qualifications cycle, according to the Qualifications Framework of the European Higher Education Area</i></li> <li>• <i>Descriptors for Levels 6, 7 &amp; 8 of the European Qualifications Framework for Lifelong Learning and Appendix B</i></li> <li>• <i>Guidelines for writing Learning Outcomes</i></li> </ul>
<p>The course material aims at understanding its specialized concepts of Optometry and the application of more specialized clinical techniques on eye examination.</p> <p>Upon successful completion of the course the student will be able to:</p> <ul style="list-style-type: none"> <li>• understand basic concepts of optical eye control.</li> <li>• be familiar with devices and optometric instruments for eye investigation</li> <li>• to know ways of preoperative eye examination and emergency incidents that may occur</li> </ul>

**General Competences**

*Taking into consideration the general competences that the degree-holder must acquire (as these appear in the Diploma Supplement and appear below), at which of the following does the course aim?*

*Search for, analysis and synthesis of data and information,  
with the use of the necessary technology  
Adapting to new situations  
Decision-making  
Working independently  
Team work  
Working in an international environment  
Working in an interdisciplinary environment  
Production of new research ideas*

*Project planning and management  
Respect for difference and multiculturalism  
Respect for the natural environment  
Showing social, professional and ethical responsibility and  
sensitivity to gender issues  
Criticism and self-criticism  
Production of free, creative and inductive thinking  
.....  
Others...  
.....*

*Working independently  
Team work.*

**(3) SYLLABUS**

- Slit lamp techniques for optometric eye investigation.
- Direct and indirect lighting techniques
- Van Herick anterior chamber angle evaluation technique
- Smith's anterior chamber angle assessment technique and its modification
- Optical disc control technique with Volk lenses
- Anterior chamber angle control methodology (angulation)
- Corneal topography
- Methodology of interpretation and recording visual fields.
- Perimetry, reading results and diagnosis
- Optical coherence tomography (OCT)
- Methodology for stereoscopic and color vision evaluation
- Biometric eye test (Axial measurements, caliper)
- Preoperative optometric examination for refractive surgeries
- Ophthalmic emergencies First aid

**(4) TEACHING and LEARNING METHODS - EVALUATION**

<b>DELIVERY</b> <i>Face-to-face, Distance learning, etc.</i>	Face-to-face	
<b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b> <i>Use of ICT in teaching, laboratory education, communication with students</i>	Use of Open E-Class in teaching, laboratory education	
<b>TEACHING METHODS</b> <i>The manner and methods of teaching are described in detail. Lectures, seminars, laboratory practice, fieldwork, study and analysis of bibliography, tutorials, placements, clinical practice, art workshop, interactive teaching, educational visits, project, essay writing, artistic creativity, etc.  The student's study hours for each learning activity are given as well as the hours of non- directed study according to the principles of the ECTS</i>	<b>Activity</b>	<b>Semester workload</b>
	Lectures	52
	Laboratory practice	26
	Study and analysis of bibliography, tutorials	102
	Course total	180
<b>STUDENT PERFORMANCE EVALUATION</b> <i>Description of the evaluation procedure  Language of evaluation, methods of evaluation, summative or conclusive, multiple choice questionnaires, short-answer questions, open-ended questions, problem solving, written work, essay/report, oral examination, public presentation, laboratory work, clinical examination of patient, art interpretation, other  Specifically-defined evaluation criteria are given, and if and where they are accessible to students.</i>	I. Written final exam (50%)  II Laboratory exercises (50%)	

**(5) ATTACHED BIBLIOGRAPHY**

- *Suggested bibliography:*

- **GREEK**

1. **Investigative Techniques in Optometry** – Dr. Aristidis Chandrinou, ION Publications **2012**  
ISBN 978-960-508-053-2,

2. **Refraction-Basic Principles and Technique**, Damanakis Alexandros, 2nd edition, Litsa Medical Publications, **1999**.

- **ENGLISH**

3. **Optometry**, Keith Edwards, Richard Llewellyn Publications, London\_Boston, Butterworths, **1988**

4. **Optics and Refraction, a User-Friendly Guide**, Miller David, 2nd edition, Mosby, **1996**.

5 **Optometric Instrumentation** - Henson, D.B. , Butterworth- Heinemann **1996**.

