

COURSE OUTLINE

(1) GENERAL

SCHOOL	of HEALTH and CARE SCIENCES		
ACADEMIC UNIT	BIOMEDICAL SCIENCES		
DIVISION	OPTICS & OPTOMETRY		
LEVEL OF STUDIES	UNDERGRADUATE		
COURSE CODE	5051-5052	SEMESTER	5o
COURSE TITLE	BASIC OPTOMETRY		
INDEPENDENT TEACHING ACTIVITIES		WEEKLY TEACHING HOURS	CREDITS
<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 (THEORY) + 3 (LAB)	7
<i>Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail at (d).</i>			
COURSE TYPE <i>general background, special background, specialised general knowledge, skills development</i>	CSC - Compulsory Specialization Courses		
PREREQUISITE COURSES:	4041 INTRODUCTION TO OPTOMETRY		
LANGUAGE OF INSTRUCTION and EXAMINATIONS:	Greek		
IS THE COURSE OFFERED TO ERASMUS STUDENTS	No		
COURSE WEBSITE (URL)			

(2) LEARNING OUTCOMES

<p>Learning outcomes</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.</i></p> <p><i>Consult Appendix A</i></p> <ul style="list-style-type: none"> • <i>Description of the level of learning outcomes for each qualifications cycle, according to the Qualifications Framework of the European Higher Education Area</i> • <i>Descriptors for Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning and Appendix B</i> • <i>Guidelines for writing Learning Outcomes</i>
<p>The course aims to understand the concepts, principles and techniques of Optometry and the application of basic clinical techniques and cases related to the control of vision and the correction of various ametropies. This course aims to familiarize students with optometry and the ethics of healthcare.</p> <p>Upon successful completion of the course the student will be able to:</p> <ul style="list-style-type: none"> to understand basic Optometric concepts and terms, and techniques be familiar with the control of vision with subjective, and objective methods to know ways to control eye problems and the use of basic instruments of Optometry.

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

Schematic eye, and models of normal eyes by various researchers, Binocular vision, Optics for the control of distant and near vision, Visual acuity, Ammetropias and their symptomatology.
Methodology of vision control using basic Optometric devices and Subjective and Objective Refraction, so that students develop diagnostic reasoning skills.
In detail, the course material includes:
Anatomy and physiology
Ametropias and their symptoms
Basic principles of operation and use of Basic Optical Instruments (case, sconoscope, ophthalmoscope and mainly Direct Ophthalmoscopy & Indirect Ophthalmoscopy, tachometer, refractometer, slit lamp, tonometer)
Use of taxpayer in subjective refraction
Shading technique
Immediate Ophthalmoscopy & Indirect Ophthalmoscopy
Specialized tests for the control of far and near vision
Principles of Subjective Refraction (acidity tables, ametropia astigmatism, pendulum and cross cylinder, binocular balance)
Stereo vision
Basic Elements and Fundamentals of Recording Ophthalmic Findings
Neurophysiology of the eye
Working conditions of Optician - Optometrist - Ethics and medical confidentiality.
Studies and research in Optometry.

(4) TEACHING and LEARNING METHODS - EVALUATION

DELIVERY <i>Face-to-face, Distance learning, etc.</i>	Face-to-face In classroom	
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY <i>Use of ICT in teaching, laboratory education, communication with students</i>	Learning process support through the electronic platform e-class	
TEACHING METHODS <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>	Activity	Semester workload
	Lectures,	52
	Laboratory practice	39
	Study and analysis of bibliography	89
	Course total	180
STUDENT PERFORMANCE EVALUATION <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 work (50%)	

(5) ATTACHED BIBLIOGRAPHY

- Suggested bibliography:

Greek

1. "Optometry I", Pateras Evangelos – Ion Publications, 2010, ISBN 978-960-697-041-2
2. Clinical refraction, Fotinakis, Pateras, Chandrinos Ion Publications, 2000
3. Refraction, Damanakis Litsas Publications, 1999.
4. Ophthalmology, Leydhecker Wolfgang, Litsas Publications 1997

English

1. Optometric Instrumentation, D.B. Henson, Butterworth-Heinemann 1996
2. Optometry, Keith Edwards, Richard Llewellyn, εκδόσεις London, Boston, Butterworths, 1988
3. Optics of the Human Eye, Atchison A. David, Smith George, 2nd edition, Butterworth-Heinemann, 2002.
4. Clinical Optics, Elkington AR and Frank H J, 2nd edition, Blackwell Scientific Publications, 1991.
5. Introduction to the optics of the Eye, Goss A. David and West W. Roger, Butterworth-Heinemann, 2002.
6. Optics and Refraction, a User-Friendly Guide, Miller David, 2nd edition, εκδόσεις Mosby, 1996.
7. Environmental vision, Interactions of the Eye, Vision and the Environment, Pitts G. Donald, Kleinstein N. Robert, Butterworth-Heinemann, 1993.
8. Ophthalmology Spalton J.H., Hitchings A., Hunter A. Paul, 2nd edition, Wolfe Publishing, 1994.