

THE EYE IN HEALTH AND DISEASE	
GENERAL INFORMATION	
Course coordinator	Associate Professor Biljana Pauzar, MD, PhD
Assistant/Associate	Professor Tatjana Belovari, MD, PhD Associate Professor Josip Barač, MD, PhD
Study Programme	Integrated undergraduate and graduate university study of Medicine
Status of the course	Elective
Year of study, semester	2 nd year, 4 th semester
ECTS	2
Workload (hours)	Seminars (25)
Expected number of students	30
COURSE DESCRIPTION	
Course objectives	
<p>The aim of this course is to provide students of the University's integrated undergraduate and graduate study of medicine with additional knowledge about the structure and development of the eye, an organ of special sense, the basis of which is studied in the subject Histology and Embryology. The course gives students an insight into the importance of knowing the normal structure and development of the eye for understanding natural and acquired eye diseases, and connects the knowledge acquired in preclinical courses (Anatomy, Histology and Embryology) with clinical practice (Osijek University Hospital, Department of Clinical Cytology, Department of Ophthalmology). By visiting the Association of the Blind and Visually Impaired, students will learn about the impact of visual impairment on an individual's life. Special attention will be paid to new knowledge about genes involved in eye development, mechanisms of eye development and clinically important disorders of eye development.</p>	
Enrolment requirements and entry competencies	
Passed Anatomy and Biology exams	
Learning outcomes at the Programme level	
1.1, 1.2, 2.1, 3.5, 4.2	
Learning outcomes (5-10)	
<p>After attending lectures and completing seminars and after independent study and passing the exam, the student will be able to:</p> <ol style="list-style-type: none"> 1. describe the key events in the evolution of the eye 2. interpret the role and mechanism of action of genes involved in eye development and explain new knowledge about normal and impaired eye development 3. explain the action of teratogenic factors and the possibility of preventing the occurrence of eye malformations 4. know the structure of the outer, middle and inner membrane of the eye and the refractive system of the eye 5. list and describe the basic methods of clinical eye examination 6. evaluate the value and place of cytodiagnosics in eye diseases 7. to know the impact of visual impairment on an individual's life 	
Course content	
Evolution and comparative histology of the eye, structure of the eye, genes in eye development, eye	

development, congenital anomalies of the eye, external eye membrane and accessory organs of the eye, middle eye membrane and refractive system of the eye, internal eye membrane, clinical examination of the eye, cytodiagnostics and eye diseases, life with impaired vision.

Mode of teaching

Seminars

Student obligations

Students are expected to attend all class sessions, as well as to take all the examinations. However, they are allowed for excused absences, totalling 30% of all classes.

Monitoring student work (alignment of learning outcomes, teaching methods, and grading)

Teaching activity	ECTS	Learning outcome	Student activity	Assessment methods	Grade points	
					Min.	Max.
Class attendance	0,5	1-7	Class attendance; exercises	Evidence sheet; evaluation	5	25
Seminar	0,5	1-7	Attendance and active participation in seminars	Seminar diary	15	25
Final exam	1,0	1-	Learning for the written exam	Grading of the written exam	30	50
Total	2				50	100

Evaluation/grading of the final written examination:

Percentage of correct answers (%)	Grade points
60.00-69.99	30
70.00-79.99	35
80.00-89.99	40
90.00-94.99	45
95.00-100.00	50

Calculation of the final grade:

Students who achieved 30 or more points in the final exam, the points obtained in the final exam are added to the grade points obtained during the class, and this sum constitutes the final grade. Since the study program schedule descriptive assessment of elective courses, the course coordinator awards the grade "passed" to a student who achieves 50 or more grade points in the course.

Required reading (available in the library and through other media)

Title	Number of	Availability
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	copies in the library	through other media
1. Junqueira LC, Carneiro J.: Basics of histology, textbook and atlas. School book, Zagreb, 2005.	10	
2. Sadler TW.: Langman's medical embryology. School book, Zagreb, 2008.		
Additional reading		
1. The eye. U: Fawcett DW: A textbook of histology. 10 th ed. Saunders company, 1975. 2. Special sense organs. U: Young B., Heath JW.: Wheater's functional histology. Churchill Livingstone, 2002. 3. Carlson BM.: Human embryology and developmental biology. Second edition. Mosby, Inc. in 1999		
Course evaluation procedures		
Anonymous, quantitative, standardized student survey providing feedback on the course as well as on the work of course coordinators and their assistants/associates is being conducted by the QA Office of the Faculty of medicine Osijek.		
Note /Other		
E-learning does not count towards course contact hours, but is being used in teaching and comprises links to various web pages, as well as video and audio materials available on web pages.		