

<b>Subject name</b> <b>Otorhinolaryngology</b>	<b>ECTS Code</b>																
<b>Name of unit teaching the subject</b> <b>THE ZBIGNIEW RELIGA FACULTY OF MEDICAL SCIENCES IN ZABRZE, THE UNIVERSITY OF TECHNOLOGY IN KATOWICE</b>																	
<b>Studies</b>																	
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<b>Surname of instructor (instructors)</b>																	
<b>Type of class, method of implementation and specified number of hours</b>	<b>Amount of ECTS points</b>																
<p><b>A.Type of class</b></p> <ul style="list-style-type: none"> <li>• <b>lecture,</b></li> <li>• exercise classes,</li> <li>• <b><u>clinical exercise classes</u></b></li> <li>• seminars,</li> <li>• design classes</li> <li>• laboratories,</li> <li>• lectureship,</li> <li>• diploma seminar,</li> <li>• professional internship.*</li> </ul> <p>* mark where applicable</p> <p><b>B. Amount of hours in accordance with the approved curriculum</b></p> <p><b>10h of lecture</b> <b>40h of clinical exercise classes</b></p>	<p>Lecture – 0.5 ECTS Exercise classes – 2 ECTS</p> <p><b>Description of awarding ECTS points:</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 70%;">Activity</th> <th style="width: 30%;">Student workload</th> </tr> </thead> <tbody> <tr> <td>Participation in lectures</td> <td style="text-align: center;">10 hours</td> </tr> <tr> <td>Participation in practical classes</td> <td style="text-align: center;">40 hours</td> </tr> <tr> <td>Preparation for practical classes and colloquiums</td> <td style="text-align: center;">15 hours</td> </tr> <tr> <td>Examination preparation</td> <td style="text-align: center;">15 hours</td> </tr> <tr> <td>Consultations</td> <td style="text-align: center;">10 hours</td> </tr> <tr> <td><b>Total number of hours</b></td> <td style="text-align: center;"><b>90 hours / 30</b></td> </tr> <tr> <td><b>Amount of ECTS points per module</b></td> <td style="text-align: center;"><b>3ETCS</b></td> </tr> </tbody> </table>	Activity	Student workload	Participation in lectures	10 hours	Participation in practical classes	40 hours	Preparation for practical classes and colloquiums	15 hours	Examination preparation	15 hours	Consultations	10 hours	<b>Total number of hours</b>	<b>90 hours / 30</b>	<b>Amount of ECTS points per module</b>	<b>3ETCS</b>
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<b>Didactic cycle</b> 4th year, 7th semester																	
<b>Subject status</b> • <b>mandatory</b> / facultative	<b>Language of instruction</b> Polish																
<b>Didactic methods</b> Lectures Demonstration of clinical cases Demonstrations with the use of a computer Case analysis Situational method, staging Didactic discussion Direct work with the patient Use of simulators/phantoms	<b>Forms and methods of passing and general grading criteria or examination requirements</b>																
	<p><b>A. Method of passing</b> Receiving credit for practical classes Test</p> <p><b>B. Forms of passing:</b></p> <ul style="list-style-type: none"> <li>• written test after each exercise module</li> <li>• credit for practical classes: interview with the patient, conducting examinations, proposal of diagnosis and treatment</li> </ul>																

**C. Basic grading criteria**

Are individually specified, correspond to the educational effects

**Definition of preparatory subjects and initial requirements**

Required familiarity with: basics of normal anatomy as far as otorhinolaryngology, conducting a medical interview in various clinical situations, principles of conducting a otorhinolaryngological physical examination, symptoms and course of diseases

**Subject aim**

The ability to properly diagnose and treat diseases of the upper digestive and respiratory tracts as well as becoming familiar with the risks connected with their complications. Mastering the basics of laryngological examinations of the patient

Becoming familiar with the principles of:

- qualifying for and performing the most common surgical and invasive procedures as well as their complications
- perioperative safety, preparing the patient for surgery, diagnostic and medical procedures
- diagnostic and therapeutic treatment of mechanical traumas of the ear, nose, larynx, and esophagus
- behavior during medical emergencies in otorhinolaryngology, especially during laryngospasm
- diagnostic and therapeutic treatment of hearing, voice and speech disorder
- diagnostic and therapeutic treatment of head and neck cancers

Becoming familiar with the causes and clinical course, methods of treatment, complications and prognosis:

- in diseases of the ear, nose, paranasal sinuses, mouth, throat, and larynx of adults, general and local anesthesia and controlled sedation
- in diseases of the facial nerve and selected neck structures

**Curriculum**

Medical emergencies in otorhinolaryngology (dyspnea, bleeding from the respiratory tracts, foreign objects in the respiratory tracts, sudden deafness, dizziness)

Endoscopic treatment of selected disorders of the salivary glands

Cancers of the head and neck area – diagnosis and treatment

Laryngeal cancer: epidemiology, pre-cancer conditions, diagnosis, method of treatment, treatment results, rehabilitation, prophylaxis.

Allergic inflammation of the mucous membrane, mouth, nose, throat, and larynx – modern diagnostic and examination methods as well as perspectives of treating the allergy

Diagnosis and treatment of hearing loss

Implantable hearing aids

Modern methods of treating laryngeal and tracheal stenosis. Sleep apnea – diagnosis and therapy

Inflammation of the paranasal sinuses – diagnosis and treatment. Salivary gland disorders – diagnosis and treatment

New technologies in otorhinolaryngology: cochlear implants, anchored implants, voice valves, functional magnetic resonance and tractography

Exercise classes: 1. Mouth and throat – anatomy and physiology. The most common diseases of the mouth, throat, salivary glands. Methods of diagnosis and treatment of diseases of the mouth and throat. Basis of laryngological treatment of the patient. 2. The role and diseases of the lymphatic system of the throat. Mouth and throat cancers – diagnostic methods and treatment. 3. Sleep apnea. Polysomnography – the “golden standard” in diagnosing sleep apnea, interpretation of examination results. Collaboration between laryngologist and dentist as far as diseases of the mouth and throat 4. Esophagus – anatomy and physiology. Inflammations and foreign objects in the esophagus. Esophageal traumas – diagnosis and treatment. 5. Nose and the paranasal sinuses – anatomy and physiology. The most common inflammatory diseases of the nasal cavity and the sinuses, imaging and endoscopic diagnosis, conservative and surgical treatment. Nosebleeds – behavior. Case demonstration, demonstration of endoscopic surgeries with the use of a visual track. 6. Nasal traumas and traumas of the paranasal sinuses, Craniofacial traumas – clinical symptoms, imaging diagnosis, treatment. Cancers of the nose and the paranasal sinuses – clinical symptoms, diagnosis, treatment. 7. Larynx, trachea, bronchi – anatomy and physiology. Inflammatory diseases of the larynx and trachea – clinical symptoms, diagnosis, treatment. Methods of examining the larynx. Clinical cases. Tracheotomy demonstration. 8. Laryngeal cancer – epidemiology, clinical forms, methods of early detection, prophylaxis, treatment. Microlaryngoscopy. – surgery demonstration. 9. The outer and middle ear – anatomy and physiology, acute and chronic inflammations. Traumas of the temporal bone. Ear cancers. Methods of ear examination. Otoscopy, micro-otoscopy, imaging examinations. Case demonstration. 10. Inner ear – anatomy and physiology. Hearing loss and deafness. Hearing loss implants. Surgeries improving hearing and treating deafness, cochlear implants, BAHA. 11. Audiology- methods of acumetric examination, tonal and speech audiometry, tympanometry. Objective audiometry. Demonstrations of test in an audiometry workshop.

<b>Literature</b> Choroby uszu, nosa i gardła – W. Becker, H.H. Naumann, C.R. Pfaltz Otolaryngologia – H.G. Boenninghaus Konsultacje otolaryngologiczne – G. Janczewski, T. Goździk-Żołnierkiewicz Otolaryngologia praktyczna – podręcznik dla studentów i lekarzy edited by G. Janczewski		
<b>Educational effects:</b>		
<b>Effect no</b>	<b>Description of an educational effect</b>	<b>Reference to field of study related effects</b>
<b>Knowledge:</b>		
W1	Has knowledge regarding laryngology, phoniatrics, and audiology, including: a) knows and understands the causes, clinical course, methods of treatment, complications, and prognosis of diseases of the ear, nose, paranasal sinuses, mouth, throat, and larynx in adults b) knows diseases of the facial nerve and selected neck structures c) knows the principles of diagnostic and therapeutic treatment of mechanical traumas of the ear, nose, larynx, and esophagus d) knows the principles of behavior in medical emergencies in otorhinolaryngology, especial in laryngospasm e) knows the principles of diagnostic and therapeutic treatment of cancers of the head and neck	F.W12
W2	Knows the principles of qualifying the patient for basic surgical and invasive diagnostic and medical procedures, how to perform them and their most common complications	F.W3
W3	Knows the principles of perioperative safety, preparing the patient for surgery, administering general and local anesthesia as well as controlled sedation	F.W4
<b>Abilities:</b>		
U1	Can perform the basic laryngological examination of the ear, nose, throat, and larynx	F.U25
U2	Can conduct an exploratory examination of hearing	F.U26
U3	Assists with typical surgical procedures, can prepare the operating field and administer local and general anesthesia	F.U1
U4	Can use basic surgical instruments	F.U2
U5	Follows the principles of asepticism and antisepticism	F.U3
U6	Can treat a simple wound, put on and change a sterile surgical bandage	
<b>Social competencies:</b>		
K1	Recognizes his own diagnosis and treatment limitations, educational needs, plans his educational activities	
K2	Can work in a professional team, in a multi-cultural and multi-national environment	
K3	Implements principles of professional collegueship and collaboration with representatives of other professions as far as healthcare	
K4	Protects patient confidentiality and patient rights	
<b>Methods used in the verification of educational effects</b>		

Educational effect	Type of grade				
	colloquiums	Solving problems during exercise classes	Solving problems in groups	Oral/practical examination	Written examination
W1-W3	X			X	X
U1		X	X	X	X
U2		X	X	X	X
U3		X	X	X	X
U4		X	X	X	X
U5		X	X	X	X
U6		X	X	X	X

The practical test checks the student's abilities with the use of a simulator and directly in contact with the patient to:

- Conduct an exploratory examination of hearing (F.U26)
- Perform a laryngological examination of the ear, nose, throat, and larynx (F.U27)
- Describe and suggest a clinical course, methods of treatment, complications, and prognosis of diseases of the ear, nose, paranasal sinuses, mouth, throat, and larynx (F.W25a)

Criteria of evaluating educational effects					
Educational effect	For a grade of 3	For a grade of 3.5	For a grade of 4	For a grade of 4.5	For a grade of 5
W1	Exhibits knowledge of the educational content on a level of 60%-69%	Exhibits knowledge of the educational content on a level of 70%-76%	Exhibits knowledge of the educational content on a level of 77%-84%	Exhibits knowledge of the educational content on a level of 85%-92%	Exhibits knowledge of the educational content on a level of 93%-100%
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U2	Exhibits knowledge of the educational content on a level of 60%-69%	Exhibits knowledge of the educational content on a level of 70%-76%	Exhibits knowledge of the educational content on a level of 77%-84%	Exhibits knowledge of the educational content on a level of 85%-92%	Exhibits knowledge of the educational content on a level of 93%-100%