| 1. | Subject | OTORHINO | LARY | YNGOLOGY | | |
|-----|--|--------------------------------------|------------------|-------------------|---|--|
| 2. | Code | OM 522 | | | | |
| 3. | Study Program | General medicine | | | | |
| 4. | Organizing Institution (Unit, | UKIM-Faculty of Medicine | | | | |
| | Institute, Chair, Department) | Cathedra of otorhinolaryngology | | | | |
| 5. | Educational degree (first or second cycle) | Integrated cycle - first | | | | |
| 6. | Study year /semester | Fifth (V) | Ten th(X) | Number of credits | 6 | |
| 8. | Responsible teacher | Prof. Marina Davcheva Chakar, PhD MD | | | | |
| 9. | Preconditions: | Completed course of VII semester | | | | |
| 10. | Teaching goals of the study program (competencies): Student should learn the main symptoms and sings of certain pathological conditions in otorhinolaryngology To perform the basic investigations in this area. | | | | | |
| 11. | Contents of the study program: Theoretical course:: Clinical anatomy and physiology of the ear, congenital malformations of the external, middle and inner ear, noninflammatory, inflammatory diseases of external ear, acute and chronic middle ear diseases, otogenic complication of otitis, injuries of the middle ear, bone diseases of the middle ear, general aspects of cochlear and retrocochlear hearing loss, treatment of pediatric hearing disorders, vestibular disorders, tumors of the ear, tumors of the cerebellopontine angle, sudden snsorineural hearing loss, temporal bone fractures, diagnosis and managment of facial paralysis, auditory rehabilitation Clinical anatomy immunology and physiopogy of the nose and paranasal sinuses. morphology of rhe nasal mucosa, nasal deformities, inflamaton of external nose, nasal cavity and facial soft tissues, sinus inflamation,nasal polyposis, rhinosinugenic complicatios, tumors of the nasal cavity and | | | | | |

- paranasal sinuses, allergic rhinitis, vasomotor rhinitis, epistaxis, fractures of the nasal pyramid, tumors of the nose nad paranasal sinuses.
- Anatomy, physiology and immunology of the pharynx, diseases of the nasopharynx, or opharynx, peripheral obstructive sleep apnea syndome, tumors, diseases of the hypopharynx and esophagus.
- Anatomy of the external neck, malformation,inflammation and tumors of the neck,clinical anatomy of the larynx and trachea, malformation of the larynx and trachea, infectious diseases of the larynx and trachea in adults and childfren,chronic nonspecific laryngitis, foreign-body aspiration and injures of the larynx and trachea, tumors of the larynx and trachea,airway management, neurogenic disorders of the larynx, clinical aspects of the voice disorders, speech and language disorders.

Practical course:

- Examination of the ear (inspection and otoscopy), clinical hearing tests, basic princips of audiometry, nystagmus clasification and tests,
- History and clinical examination of the nose, nasal endoscopy, special rhinologic tests, imiging of the nose and paranasal sinuses.
- Methods of examining the farynx,
- Symptomatology and examination of larynx (inspection, palpation indirect and direct laryngoscopy) and trachea, imaging of the larynx and trachea,

12. **Methods of studying:** Interactive lectures, group work, exercises, seminar paper 13. 90 hours Total no. of hours: 14. Distribution of the available time Lectures-theoretical 15. 15.1 30 hours **Type of educational** activity course 15 hours seminars 15.2 Practicals (laboratory, 45 .hours clinical), seminars, team work Other types of 16. 16.1 Project assignments hours activities 16.2 Individual tasks hours 16.3 Home studying hours 17. **Assessment of knowledge:** points

| | 17.1 | Tests | | | minmax. | |
|-----|---|----------------------------|---------|---|-----------------|--|
| | | | | 2 Continuous tests | | |
| | | | | Otology and audiology | 12-20 | |
| | | | | Nose, paranasal sinuses Farynx,larynx | s, 12-20 | |
| | | | | | Total 40 points | |
| | | Final exam | | Subject: otorhinolaryngology | | |
| | | | | | minmax. | |
| | | | | Practical exam 9-10 po | oints | |
| | | | | Oral exam 21-35 points | | |
| | 17.2 | Seminar work/proj | | | minmax. | |
| | | (presentation: writt oral) | en and | Seminar works | 1-3 points | |
| | 17.3 | Active participation | n | | minmax. | |
| | | | | Theoretical course | points 1-5 | |
| | | | | Practical course | points 4-7 | |
| 18. | Know | ledge assessment | up | to 59 points | 5 (five) F | |
| | criteri | a: | 60 | to 68 points | 6 (six) E | |
| | (poin | ts/grade) | 69 | to 76 points | 7 (seven) D | |
| | | | 77 | to 84 points | 8 (eight) C | |
| | | | 85 | to 92 points | 9 (nine) B | |
| | | | 93 1 | to 100 points | 10 (ten) A | |
| 19. | signature and taking the final exam order to requeste | | | tional criteria for assessment of knowledge: In o get a signature for the course, students are ed to actively participate in the activities, including tinual assessment (the tests). | | |
| 20. | Langu | age of the course | Macedon | nian | | |
| | | | | nous student's evaluation of the | | |

| 22. | Literature | | | | | | | |
|-----|------------|-----------------------|--|---|---|------|--|--|
| | | Manda | Mandatory textbooks | | | | | |
| | | | Author | Title | Publisher | Year | | |
| | 22.1 | 1 | Rudolf Probst ,Gerhard Grevers, Heinrich Iro | Basic otorhinolaryngo logy | Georg Thieme Verlag Stuttgard- New York, | 2006 | | |
| | | 7 | | | | | | |
| | | Additional literature | | | | | | |
| | | | Author | Title | Publisher | Year | | |
| | 22.2 | 1 | K. J. Lee, M.D. | K.J.LEEs Essential otolaryngology | Tenth edition Copyright material by | 2012 | | |
| | | | | head and neck surgery, | Mc-Grow Hill Companies, | | | |