UNIVERSITÀ DEGLI STUDI DI PALERMO

DEPARTMENT	Biomedicina, Neuroscienze e Diagnostica avanzata
ACADEMIC YEAR	2023/2024
MASTER'S DEGREE (MSC)	MEDICINE AND SURGERY
INTEGRATED COURSE	SENSE ORGANS DISEASES - INTEGRATED COURSE
CODE	13946
MODULES	Yes
NUMBER OF MODULES	3
SCIENTIFIC SECTOR(S)	MED/28, MED/31, MED/30
HEAD PROFESSOR(S)	GALLINA GIUSEPPE — Professore Ordinario — Univ. di PALERMO MESSINA PIETRO — Professore Ordinario — Univ. di PALERMO
OTHER PROFESSOR(S)	VADALA' MARIA — Professore Associato — Univ. di PALERMO GALLINA GIUSEPPE — Professore Ordinario — Univ. di PALERMO GALLINA SALVATORE — Professore Ordinario — Univ. di PALERMO BONFIGLIO VINCENZA MARIA ELENA — Professore Ordinario — Univ. di PALERMO MESSINA PIETRO — Professore Ordinario — Univ. di PALERMO SARANITI CARMELO — Professore Associato — Univ. di PALERMO
CREDITS	9
PROPAEDEUTICAL SUBJECTS	
MUTUALIZATION	
YEAR	5
TERM (SEMESTER)	1° semester
ATTENDANCE	Mandatory
EVALUATION	Out of 30
TEACHER OFFICE HOURS	**BONFIGLIO VINCENZA MARIA ELENA** Monday 13:00 14:00 Unita Complessa di oftalmologiaEx Istituto Materno infantile "Villa Belmonte" **GALLINA GIUSEPPE** Tuesday 10:00 12:00 Uffici di Presidenza del CdS di Medicina e Chirurgia **GALLINA SALVATORE** Tuesday 12:00 14:00 Stanza Medici Clinica ORL **MESSINA PIETRO** Tuesday 09:00 11:00 1° piano Plesso di Odontostomatologia **SARANITI CARMELO** Monday 12:00 13:00 Ambulatorio Orl - U.O.C. **VADALA' MARIA** Monday 12:00 14:00 Wednesday 09:00 10:00

DOCENTE: Prof. GIUSEPPE GALLINA- *Sede CHIRONE, - Sede HYPATIA*

PREREQUISITES	Pre-knowledge requirements necessary to achieve the objectives of the Integrated Programme are: - The knowledge of embryology, anatomy and physiology of the structures of the oral-maxillofacial district and, in particular oral cavity, teeth and constituents of the stomatognathic system; the auditory, nasal and laryngeal apparatus; the visual system; - the knowledge of oropharyngeal ecosystem and, in particular, the microorganisms of the plaque and their cariogenic role; - The knowledge of the mechanisms of inflammation (Angiophlogosis and hIstoflogosi) and the oropharyngeal immune response and systemic immune response; - Knowledge of the fundamentals of inorganic chemistry: chemical bonds, solutions, oxidation-reduction, acids and bases and inorganic and biomolecular chemistry. - Knowledge of the fundamentals of mechanics, dynamics, thermodynamics, rheology, optics, electro physics, radiation physics, principles of radio protection and radiographic technique; - Knowledge of the principles of prevention of infectious diseases and cross infections, disinfection and sterilization of surgical instruments; - Knowledge of the principles of Pharmacology and Anesthesiology.
LEARNING OUTCOMES	- Knowledge and ability to understand: knowledge of the essentials of anatomy, physiology and pathology of stomatognathic, visual and ORL apparatus. - Capacity to apply knowledge and understanding: ability to recognize and diagnose the main relevance of the diseases of mouth, eye, ear, nose and throat, as well as to frame the clinical signs, in such districts, of systemic diseases. - Making judgments: possibility of formulating diagnostic procedures for the assessment of the main oral, eye and ORL diseases. - Enable communication: refer the patient to a more effective and prompt diagnosis and therapy of the major oral, eye and ORL diseases and related syndromes. Achieve adequate autonomy in setting the diagnosis and related treatment plan. Being able to critically interact with the patient, his family and with medical specialists working in private practice regime and in the National Health Service. - Capacity of Learning: acquiring adequate knowledge to a capacity of continuing education in the field of the major oral, eye, ORL and related syndromes.
ASSESSMENT METHODS	Oral Examination, unique and contemporary, for all modules of the Integrated Course, according to the calendar. Thirty Rating. At least two questions will be asked for each module to assess the acquired knowledge, the elaboration and synthesis skills, and the possession of adequate speaking skills. In case of serious shortcomings on basic subjects of a single module the examination may be interrupted. The candidate receives an assessment out of thirty as final grade (the pass mark is 18\30). Assessment criteria are: - Excellent knowledge of teaching contents; the candidate demonstrates high analytical-synthetic capacity and is able to apply knowledge in the complex clinical solution (Score: 30, 30L; Rating: Excellent) - Good-Excellent knowledge of teaching content and appropriate language property use; the student demonstrates analytical-synthetic ability and is able to apply the knowledge to solve clinical questions, (Score 27-29; Rating: Very Good) - Good knowledge of teaching content and language use; the student is able to apply the knowledge to solve clinical questions of average complexity (Score 24-26; Rating: good) - Satisfactory knowledge of the teaching content, in certain limited cases to the main topics; acceptable ability to use the discipline - specific language and to apply the acquired knowledge autonomously (Score: 21-23; Rating: satisfactory) - Minimum knowledge of the teaching content limited to the main topics; modest ability to use the discipline - specific language and to apply the acquired knowledge autonomously (Score 18-20; Rating: sufficient) - The candidate does not have an acceptable knowledge of the main teaching content and is not able to apply the acquired knowledge independently; insufficient or no ability to use the discipline-specific language (Score: < 18 - Rating: failed - not approved).
TEACHING METHODS	Lectures, training in clinic departments

DOCENTE: Prof. PIETRO MESSINA- *Sede IPPOCRATE*

PREREQUISITES	Pre-knowledge requirements necessary to achieve the objectives of the Integrated Programme are: - The knowledge of embryology, anatomy and physiology of the structures of the oral-maxillofacial district and, in particular oral cavity, teeth and constituents of the stomatognathic system; the auditory, nasal and laryngeal apparatus; the visual system; - the knowledge of oropharyngeal ecosystem and, in particular, the microorganisms of the plaque and their cariogenic role; - The knowledge of the mechanisms of inflammation (Angiophlogosis and hIstoflogosi) and the oropharyngeal immune response and systemic immune response; - Knowledge of the fundamentals of inorganic chemistry: chemical bonds, solutions, oxidation-reduction, acids and bases and inorganic and biomolecular chemistry. - Knowledge of the fundamentals of mechanics, dynamics, thermodynamics, rheology, optics, electro physics, radiation physics, principles of radio protection and radiographic technique; - Knowledge of the principles of prevention of infectious diseases and cross infections, disinfection and sterilization of surgical instruments; - Knowledge of the principles of Pharmacology and Anesthesiology.
LEARNING OUTCOMES	- Knowledge and ability to understand: knowledge of the essentials of anatomy, physiology and pathology of stomatognathic, visual and ORL apparatus. - Capacity to apply knowledge and understanding: ability to recognize and diagnose the main relevance of the diseases of mouth, eye, ear, nose and throat, as well as to frame the clinical signs, in such districts, of systemic diseases. - Making judgments: possibility of formulating diagnostic procedures for the assessment of the main oral, eye and ORL diseases. - Enable communication: refer the patient to a more effective and prompt diagnosis and therapy of the major oral, eye and ORL diseases and related syndromes. Achieve adequate autonomy in setting the diagnosis and related treatment plan. Being able to critically interact with the patient, his family and with medical specialists working in private practice regime and in the National Health Service. - Capacity of Learning: acquiring adequate knowledge to a capacity of continuing education in the field of the major oral, eye, ORL and related syndromes.
ASSESSMENT METHODS	Oral Examination, unique and contemporary, for all modules of the Integrated Course, according to the calendar. Thirty Rating. At least two questions will be asked for each module to assess the acquired knowledge, the elaboration and synthesis skills, and the possession of adequate speaking skills. In case of serious shortcomings on basic subjects of a single module the examination may be interrupted. The candidate receives an assessment out of thirty as final grade (the pass mark is 18\30). Assessment criteria are: - Excellent knowledge of teaching contents; the candidate demonstrates high analytical-synthetic capacity and is able to apply knowledge in the complex clinical solution (Score: 30, 30L; Rating: Excellent) - Good-Excellent knowledge of teaching content and appropriate language property use; the student demonstrates analytical-synthetic ability and is able to apply the knowledge to solve clinical questions, (Score 27-29; Rating: Very Good) - Good knowledge of teaching content and language use; the student is able to apply the knowledge to solve clinical questions of average complexity (Score 24-26; Rating: good) - Satisfactory knowledge of the teaching content, in certain limited cases to the main topics; acceptable ability to use the discipline - specific language and to apply the acquired knowledge autonomously (Score: 21-23; Rating: satisfactory) - Minimum knowledge of the teaching content limited to the main topics; modest ability to use the discipline - specific language and to apply the acquired knowledge autonomously (Score 18-20; Rating: sufficient) - The candidate does not have an acceptable knowledge of the main teaching content and is not able to apply the acquired knowledge independently; insufficient or no ability to use the discipline-specific language (Score: < 18 - Rating: failed - not approved).
TEACHING METHODS	lessons seminary

MODULE
VISUAL SYSTEM DISEASES

- Sede HYPATIA, - Sede HYPATIA

SUGGESTED BIBLIOGRAPHY

S. Miglior, T. Avitabile, S. Bonini et al: Malattie dell'apparato visivo. Edises Editore 2014. ISBN-10 8879598287
M. Miglior: Oftalmologia clinica. Ed. Monduzzi, Bologna 2006 ISBN-10 9788832360110
Frezzotti, Guerra, Oftalmologia essenziale, 2006 Ambrosiana ISBN-10 884081339X
Caporossi, Oftalmologia edizione Piccin 2017 ISBN-10 8829927619

AMBIT	50418-Clinica medico-chirurgica degli organi di senso
INDIVIDUAL STUDY (Hrs)	45
COURSE ACTIVITY (Hrs)	30

EDUCATIONAL OBJECTIVES OF THE MODULE

1 Prerequisites: Knowledge of general notions of biochemistry, pharmacology, physiology and degenerative neoplastic vascular inflammatory pathology
2 Ways of verifying learningthe student must answer at least 2 oral questions on all the parts of the program, with reference to the lectures, exercises and recommended tests
3 Knowledge and understanding: The student at the end of the Course of Diseases of the Visual Apparatus must be able to: know the essential elements of anatomy, physiology and pathology of the visual apparatus. In particular, the student must be able to recognize the most common pathological pictures and know the ocular complications representative of the most frequent systemic diseases. Students also get to have acquired complete knowledge of other diseases or diseases affecting disciplines and involve other districts, so as to enable their diagnosis and understanding. Ongoing checks during the course will allow to underestimate the progress of learning in a concise, practical and systematic way of the fundamental notions of Ophthalmology and of what is essential for the activity of the non-specialist doctor.
Assessment and evaluation skills: At the end of the course, the student will be able to recognize the most common eye diseases and to properly evaluate and correctly address the patient to the specialist. This objective will be verified through professional meetings of students in small groups aimed at learning and practicing the diagnostic rudiments of the main ocular pathologies, as well as the recognition of the predictive ocular signs and symptoms of systemic pathologies.
4. Ability to apply knowledge and understanding

SYLLABUS

Hrs	Frontal teaching
2	Anatomy of the conjunctiva and conjunctivitis. Main causes, differential diagnosis and treatment of red eye.Differential diagnosis: bacterial, viral and allergic (seasonal, spring and Vernal's). Differential Diagnosis of Red Eye. . Cornea Anatomy: Viral keratitis: herpes simplex and zoster. Acantameba and mycotic keratitis. Lagophthalmic keratopathy. neurotrophic keratopathy, degeneration and corneal dystrophy and keratoconus. Corneal transplant: lamellar endothelial perforator
2	Crystalline anatomy and suspensory apparatus and accommodation. Pathology of the crystalline: of transparency or cataract (etiological classification, age of onset and maturity). congenital character, senile cataract, position anomalies (slow actopia) marfan syndrome. Phacoemulsification cataract extraction techniques
2	Retina: macro and microscopic anatomy and vascularization. Retinal detachment: rhematogenous, exudative, Tractional. Prophylaxis of rhegmatogenous retinal detachment, Symptomatology of rhegmatogenous retinal detachment, diagnosis and hints of surgical treatment: ab extern, pneumoretinopexy and vitrectomy pica and vascularization. Retinal detachment: rhematogenous, exudative, Tractional. Prophylaxis of rhegmatogenous retinal detachment, Symptomatology of rhegmatogenous retinal detachment, diagnosis and therapy: surgical treatment: ab external, pneumoretinopexy and vitrectomy. Retinoblastoma
2	Anatomy and pathology of ocular hydrodynamics: glaucoma: classification: simple chronic glaucoma (diagnosis, symptoms and therapy) or open angle glaucoma, congenital glaucoma (diagnosis, symptoms and therapy) ocular hypertension, secondary glaucoma (facolytic, post uveitis, neovascular) acute glaucoma: symptoms and diagnosis and therapy. Surgical therapy of glaucoma
2	Age-related macular degeneration: physiopathology of the retina of the pigment epithelium and formation of drusen. Risk factors. Classification: Dry and Wet. Classification of wet forms: topographic (sub, juxta or extrafoveal) or etiopathological (classic occult and mixed). Diagnosis. symptomatology and therapy.Ppathology of the vitreous retinal interface: macular hole, lamellar hole, pucker. Hereditary diseases of the retina: retinitis pigmentosa and cone dystrophy
2	Causes and classification of refractive defects: myopia, hyperopia and astigmatism and their correction. Presbyopia accommodation. Amblyopia and its correction. Notes on correction with refractive surgery
2	Vascular pathology of the retina: venous and arterial occlusions (central and branch), etiopathogenesis, symptomatology, diagnosis and therapy. Diabetic retinopathy: etiopathogenesis. Classification Diagnosis, symptomatology, laser and surgical therapy. Complications of diabetic retinopathy. Diabetic macular edema: classification, diagnosis and therapy
2	Retinopathy of premature babies (ROP): etiopathogenesis, classification (I, II, III, IV stage), diagnosis and therapy

2	Anatomy of the Uvea and Classifications of Uveitis: anatomical, pathology and clinic. Symptoms Diagnosis and therapy of anterior, intermediate and posterior uveitis. Benign tumors of the choroid: iris and choroidal nevus and hemangioma of the choroid. choroid melanoma. Symptoms Diagnosis and therapy
2	Alteration of ocular motility with classification of strabismus (according to the angle; according to the time of onset; according to the direction of the deviation. Complications of strabismus, amblyopia suppression of diplopia. Main diagnostic techniques of strabismus.
2	Pathology of the orbit basedow ophthalmopathy and orbital cellulitis. pathology of the eyelids and tear ducts: Inflammatory pathology of the eyelids: sty, chalazion, blepharitis ,. Abnormality of eyelid position: ectropion and entropion; Anatomy, physiology and pathology of lacrimation; and tear outflow; chronic and acute dacryocystitis
2	Definition of the most frequent diseases of the optic nerve: Aetiopathogenesis Classification and clinic. optic neuritis Pathologies of the optic pathways (chiasmatic, retrochiasmatic alterations). Stasis papilla. Study of direct and consensual pupillary reflexes
2	Main instrumental investigations widely used in the ophthalmological field (examination with slit lamp, tonometry, fluorangiography, visual sampling, optometry, etc ..): techniques and principles
2	Retinal diseases in the main systemic diseases: diabetic and hypertensive retinopathy
2	Causes of low vision in childhood: retinoblastoma

MODULE
OTORHINOLARYNGOLOGY

Prof. CARMELO SARANITI - Sede CHIRONE, - Sede CHIRONE

SUGGESTED BIBLIOGRAPHY

Albera R.; Rossi G. Otorinolaringoiatria ED. Minerva medica

AMBIT	50418-Clinica medico-chirurgica degli organi di senso
INDIVIDUAL STUDY (Hrs)	45
COURSE ACTIVITY (Hrs)	30

EDUCATIONAL OBJECTIVES OF THE MODULE

The aims of the course are to investigate anatomy and physiology of the upper airways, the study of inflammatory , degenerative and neoplastic diseases of the nose and paranasal sinuses, pharinx, larynx and ear. Particular attention will also be devoted to OSAS (Obstructive Sleep Apnea Syndrome) of adult and pediatric age, especially to endoscopic diagnosis and surgical threatment. In oto-neurologic field, the chapter of peripheral vertiginous syndromes will be examinated.

SYLLABUS

Hrs	Frontal teaching
2	Acute and chronic rhinitis. Epistaxis
2	Sinusitis; Nasal poliposis
2	Neoplastic pathology of nose and sinus
2	Rhinopharyngeal carcinoma
2	Tonsillitis
3	Acute and chronic otitis and their complications
3	Dizziness
3	Otosclerosis
3	Meniere's disease
2	Dysphonia
3	Laryngeal Carcinoma
3	Obstructive sleep apnea

MODULE
ODONTO-STOMATOLOGICAL DISEASES

Prof. GIUSEPPE GALLINA - Sede CHIRONE, - Sede CHIRONE, - Sede HYPATIA, - Sede HYPATIA

SUGGESTED BIBLIOGRAPHY

- Valletta G., Materasso S., Mignogna MD.: "Malattie Odontostomatologiche" – Ed. Piccin, Padova;
- Montebugnoli L.: "Lezioni di Clinica Odontostomatologica". – Ed. Martina, Bologna;
- Pappalardo G.: "Manuale di Clinica Odontostomatologica" - Societa' Editrice Universo, Roma

AMBIT	50418-Clinica medico-chirurgica degli organi di senso
INDIVIDUAL STUDY (Hrs)	45
COURSE ACTIVITY (Hrs)	30

EDUCATIONAL OBJECTIVES OF THE MODULE

- To acquire the basic knowledge of anatomy and physiology of the oral cavity and of the more frequent oral diseases: dental caries, periodontal disease, stomatomucositis, cancer.
- To Know the aspects related to the prevention, early diagnosis and symptoms of dental caries, periodontal disease, stomatomucositis and oral cancers.
- To Understand the relationship between oral diseases, other organs, systemic and related syndromes.
- To acquire the principles of medical and surgical treatments of these diseases.
- To Identify the diagnostic guidelines, objectives and instrumental, of the oral pathologies district.
- To Propose medical and surgical treatment protocols for the main dysfunctional, inflammatory, neoplastic and traumatic diseases of this district.

SYLLABUS

Hrs	Frontal teaching
2	Anatomy and physiology of the teeth, of periodontium, of the jaw bones and soft tissues of the oral cavity.
2	graphic designation of the teeth, dental formula, cronology of tooth eruption
3	Classification, risk factors and diagnosis of oral precancerous lesions
3	Dysodontiasis of the third molar. Odontogenic Abscesses and Phlegmons.
2	Osteomyelitis and osteonecrosis of the jaws
1	Dental trauma
3	Epidemiology, aetiology, symptoms, prevention and therapy of periodontal disease.
1	Dysfunctional TMJ syndrome.
1	Odontogenous Trigeminal neuralgia
2	Classification, risk factors and diagnosis of oral precancerous lesions
3	Classification, risk factors and early diagnosis of cancer of the hard and soft tissues of the oral cavity.
3	Classification, aetiology, symptoms and therapy of infectious, drug and autoimmune stomatomucositis
1	Xerostomia
3	systemic and syndromic diseases of the oral cavity

MODULE
ODONTO-STOMATOLOGICAL DISEASES

Prof. PIETRO MESSINA - Sede IPPOCRATE, - Sede IPPOCRATE

SUGGESTED BIBLIOGRAPHY

-Valletta G., Materasso S., Mignogna MD.: "Malattie Odontostomatolo-giche" – Ed. Piccin, Padova;
- Montebugnoli L.: "Lezioni di Clinica Odontostomatologica". – Ed. Martina, Bologna;
- Messina P., Scardina G.A.: “Patologie della mucosa orale”- Ed. Aracne

AMBIT	50418-Clinica medico-chirurgica degli organi di senso
INDIVIDUAL STUDY (Hrs)	45
COURSE ACTIVITY (Hrs)	30

EDUCATIONAL OBJECTIVES OF THE MODULE

To acquire the basic knowledge of anatomy and physiology of the oral cavity and the common diseases: caries, periodontal disease, stomatitis, oral cancer.
Learn about issues related to the prevention, early diagnosis and symptoms of caries, periodontal disease, stomatitis of oral cancer.
Knowing the relationship between oral disease, other organs, systemic and related syndromes.
To acquire the principles of medical and surgical treatment of these diseases.
Locate the diagnostic guidelines, objectives and tools, oral diseases.
Propose of medical and surgical therapy protocols in the main dysfunctional diseases, inflammatory, neoplastic and traumatic oral.

SYLLABUS

Hrs	Frontal teaching
2	Anatomy and physiology of the teeth, periodontal, the bones and soft tissues of the oral cavity.
1	graphic designation of the teeth, dental formula
1	Tooth eruption.
4	Epidemiology, etiology, symptoms, prevention and treatment of dental caries and pulpits. Hypersensitivity 'dentin
1	Dysodontiasis 3rd molar. Abscesses and phlegmon of dental disease.
2	Osteomyelitis, and osteonecrosis of the mandible and maxilla.
1	Dental trauma.
1	Epidemiology, etiology, symptoms, prevention, and signs of periodontal disease therapy.
1	Dysfunctional TMJ
2	Trigeminal neuralgia.
2	Classification, risk factors and diagnosis of oral precancerous.
3	Classification, risk factors and early detection of cancer of the hard and soft tissues of the oral cavity.
5	Classification, etiology, symptoms and treatment of infectious stomatitis caused by drugs, autoimmune.
2	Xerostomia
2	The oral and systemic diseases in the syndromic

MODULE
OTORHINOLARYNGOLOGY

Prof. SALVATORE GALLINA - Sede HYPATIA, - Sede HYPATIA

SUGGESTED BIBLIOGRAPHY	
Albera R.; Rossi G. Otorinolaringoiatria ED. Minerva medica	
AMBIT	50418-Clinica medico-chirurgica degli organi di senso
INDIVIDUAL STUDY (Hrs)	45
COURSE ACTIVITY (Hrs)	30
EDUCATIONAL OBJECTIVES OF THE MODULE	
The aims of the course are to investigate anatomy and physiology of the upper airways, the study of inflammatory , degenerative and neoplastic diseases of the nose and paranasal sinuses, pharinx, larynx and ear. Particular attention will also be devoted to OSAS (Obstructive Sleep Apnea Syndrome) of adult and pediatric age, especially to endoscopic diagnosis and surgical threatment. In oto-neurologic field, the chapter of peripheral vertiginous syndromes will be examinated.	

SYLLABUS

Hrs	Frontal teaching
2	Acute and chronic rhinitis. Epistaxis
2	Sinusitis; Nasal poliposis
2	Neoplastic pathology of nose and sinus
2	Rhinopharyngeal carcinoma
2	Tonsillitis
3	Acute and chronic otitis and their complications
3	Dizziness
3	Otosclerosis
3	Meniere's disease
2	Dysphonia
3	Laryngeal Carcinoma
3	Obstructive sleep apnea

MODULE
OTORHINOLARYNGOLOGY

Prof. SALVATORE GALLINA - Sede IPPOCRATE, - Sede IPPOCRATE

SUGGESTED BIBLIOGRAPHY	
Albera R.; Rossi G. Otorinolaringoiatria ED. Minerva medica	
AMBIT	50418-Clinica medico-chirurgica degli organi di senso
INDIVIDUAL STUDY (Hrs)	45
COURSE ACTIVITY (Hrs)	30
EDUCATIONAL OBJECTIVES OF THE MODULE	
The aims of the course are to investigate anatomy and physiology of the upper airways, the study of inflammatory , degenerative and neoplastic diseases of the nose and paranasal sinuses, pharinx, larynx and ear. Particular attention will also be devoted to OSAS (Obstructive Sleep Apnea Syndrome) of adult and pediatric age, especially to endoscopic diagnosis and surgical threatment. In oto-neurologic field, the chapter of peripheral vertiginous syndromes will be examinated.	

SYLLABUS

Hrs	Frontal teaching
2	Acute and chronic rhinitis. Epistaxis
2	Sinusitis; Nasal poliposis
2	Neoplastic pathology of nose and sinus
2	Rhinopharyngeal carcinoma
2	Tonsillitis
3	Acute and chronic otitis and their complications
3	Dizziness
3	Otosclerosis
3	Meniere's disease
2	Dysphonia
3	Laryngeal Carcinoma
3	Obstructive sleep apnea

MODULE
VISUAL SYSTEM DISEASES

Prof.ssa MARIA VADALA' - Sede CHIRONE, - Sede CHIRONE

SUGGESTED BIBLIOGRAPHY

S. Miglior, T. Avitabile, S. Bonini et al: Malattie dell'apparato visivo. Edises Editore 2014. ISBN-10 8879598287 M. Miglior: Oftalmologia clinica. Ed. Monduzzi, Bologna 2006 ISBN-10 9788832360110 Frezzotti, Guerra, Oftalmologia essenziale, 2006 Ambrosiana ISBN-10 884081339X Caporossi, Oftalmologia edizione Piccin 2017 ISBN-10 8829927619

AMBIT	50418-Clinica medico-chirurgica degli organi di senso
INDIVIDUAL STUDY (Hrs)	45
COURSE ACTIVITY (Hrs)	30

EDUCATIONAL OBJECTIVES OF THE MODULE

Prerequisites: Knowledge of general notions of biochemistry, pharmacology, general antomy and physiology, degenerative neoplastic vascular inflammatory pathology .
Ways of verifying learning: the student must answer at least 2 oral questions on all the parts of the program, with reference to the lectures, exercises and recommended tests. Ongoing evaluations during the course can be introduced in order to estimate the progress of learning in a concise, practical and systematic way of the fundamentals of Ophthalmology and of what is essential for the activity of the non-specialist doctor.
Knowledge and understanding: The student at the end of the Course of Diseases of the Visual Apparatus must be able to: know the essential elements of anatomy, physiology and pathology of the visual apparatus. In particular, the student must be able to recognize the most common pathological pictures and know the ocular complications representative of the most frequent systemic diseases. Students also get to have acquired complete knowledge of other diseases or diseases affecting disciplines and involve other districts, so as to enable their diagnosis and understanding.
Ability to apply knowledge and understanding. Assessment and evaluation skills. At the end of the course, the student will be able to recognize the most common eye diseases and to properly evaluate and correctly address the patient to the specialist. This objective will be verified through professional meetings of students in small groups aimed at learning and practicing the diagnostic rudiments of the main ocular pathologies, as well as the recognition of the predictive ocular signs and symptoms of systemic pathologies.

SYLLABUS

Hrs	Frontal teaching
3	Introduction to the course. Vision and life. Causes and classification of refractive defects: myopia, hyperopia and astigmatism and their correction. Presbyopia and accommodation. Amblyopia and its correction. Notes on correction with refractive surgery.
2	Anatomy of the conjunctiva and conjunctivitis. Main causes, differential diagnosis and treatment of red eye.Differential diagnosis: bacterial, viral and allergic (seasonal, spring and Vernal's). Differential Diagnosis of Red Eye. Cornea Anatomy: Viral keratitis: herpes simplex and zoster. Acantameba and mycotic keratitis. Lagophthalmic keratopathy. neurotrophic keratopathy, degeneration and corneal dystrophy and keratoconus. Corneal transplant.
2	Lens anatomy and suspensory apparatus, the accommodation. Diseases of the lens: of transparency and of position (etiological classification, age of onset and maturity). Congenital cataract, senile cataract, position anomalies (slow actopia), Marfan syndrome. Phacoemulsification and cataract extraction techniques.
2	Anatomy and pathology of ocular hydrodynamics: glaucoma: classification: simple chronic glaucoma (diagnosis, symptoms and therapy) or open angle glaucoma, congenital glaucoma (diagnosis, symptoms and therapy) ocular hypertension, secondary glaucoma (facolytic, post uveitis, neovascular) acute glaucoma: symptoms and diagnosis and therapy. Surgical therapy of glaucoma
3	Retina: macro and microscopic anatomy and vascularization. Retinal detachment: rhematogenous, exudative, tractional. Prophylaxis of rhegmatogenous retinal detachment, Symptomatology of rhegmatogenous retinal detachment, diagnosis and hints of surgical treatment: ab extern, pneumoretinopexy and vitrectomy pica and vascularization. Retinal detachment: rhematogenous, exudative, Tractional. Prophylaxis of rhegmatogenous retinal detachment, Symptomatology of rhegmatogenous retinal detachment, diagnosis and therapy: surgical treatment: ab external, pneumoretinopexy and vitrectomy. Vascular diseases of the retina: hypertensive retinopathy, diabetic retinopathy, age-related macular degeneration, retinal, arterial and venous vascular occlusions, vasculoproliferative diseases (ROP). Macular dystrophies and degenerative pathology on a genetic basis.
4	Vascular pathologies of the retina: hypertensive and diabetic retinopathy, retinal, arterial and venous vascular occlusions, vasculoproliferative diseases (ROP). Age-related macular degeneration: pathophysiology of the retina of the pigment epithelium. Clinical pictures: classification, diagnostic aspects and therapeutic approaches. Macular dystrophies and degenerative pathology on a genetic basis. New therapeutic perspectives.
2	Anatomy of the Uvea and Classifications of Uveitis: anatomical, pathologic and clinic. Symptoms, diagnosis and therapy of anterior, intermediate and posterior uveitis. Benign tumors of the choroid: iris and choroidal nevus and hemangioma of the choroid. Choroid melanoma: symptoms, diagnosis and therapy.

2	Alteration of ocular motility with classification of strabismus (according to the angle; according to the time of onset; according to the direction of the deviation. Complications of strabismus, amblyopia , confusione and diplopia. Main diagnostic techniques of strabismus.
2	Diseases of the orbit: Basedow ophthalmopathy and orbital cellulitis. Diseases of the eyelids and tear ducts: Inflammatory pathology of the eyelids: sty, chalazion, blepharitis. Abnormality of eyelid position: ectropion and entropion; Anatomy, physiology and pathology of tear production and outflow; chronic and acute dacryocystitis.
2	Definition of the most frequent diseases of the optic nerve: aetiopathogenesis, classification and clinic. Optic neuritis and pathologies of the optic pathways, chiasmatic, retrochiasmatic. Optic neuropathy. Papilledema. Pupillary reflexes. Principles for treatment.
3	Main instrumental investigations widely used in the ophthalmological field (examination with slit lamp, tonometry, fluorangiography, visual sampling, optometry, etc ..): techniques and principles
3	Low vision in developmental age and in adult-elderly age: main causes, medico-legal definitions and supporting diagnostics, the rehabilitation team and the optical instruments used.

MODULE
VISUAL SYSTEM DISEASES

Prof.ssa VINCENZA MARIA ELENA BONFIGLIO - Sede IPPOCRATE, - Sede IPPOCRATE

SUGGESTED BIBLIOGRAPHY

S. Miglior, T. Avitabile, S. Bonini et al: Malattie dell'apparato visivo. Edises Editore 2014. ISBN-10 8879598287
M. Miglior: Oftalmologia clinica. Ed. Monduzzi, Bologna 2006 ISBN-10 9788832360110
Frezzotti, Guerra, Oftalmologia essenziale, 2006 Ambrosiana ISBN-10 884081339X
Caporossi, Oftalmologia edizione Piccin 2017 ISBN-10 8829927619

AMBIT	50418-Clinica medico-chirurgica degli organi di senso
INDIVIDUAL STUDY (Hrs)	45
COURSE ACTIVITY (Hrs)	30

EDUCATIONAL OBJECTIVES OF THE MODULE

1 Prerequisites: Knowledge of general notions of biochemistry, pharmacology, physiology and degenerative neoplastic vascular inflammatory pathology
2 Ways of verifying learningthe student must answer at least 2 oral questions on all the parts of the program, with reference to the lectures, exercises and recommended tests
3 Knowledge and understanding: The student at the end of the Course of Diseases of the Visual Apparatus must be able to: know the essential elements of anatomy, physiology and pathology of the visual apparatus. In particular, the student must be able to recognize the most common pathological pictures and know the ocular complications representative of the most frequent systemic diseases. Students also get to have acquired complete knowledge of other diseases or diseases affecting disciplines and involve other districts, so as to enable their diagnosis and understanding. Ongoing checks during the course will allow to underestimate the progress of learning in a concise, practical and systematic way of the fundamental notions of Ophthalmology and of what is essential for the activity of the non-specialist doctor.
Assessment and evaluation skills: At the end of the course, the student will be able to recognize the most common eye diseases and to properly evaluate and correctly address the patient to the specialist. This objective will be verified through professional meetings of students in small groups aimed at learning and practicing the diagnostic rudiments of the main ocular pathologies, as well as the recognition of the predictive ocular signs and symptoms of systemic pathologies.
4. Ability to apply knowledge and understanding

SYLLABUS

Hrs	Frontal teaching
2	Anatomy of the conjunctiva and conjunctivitis. Main causes, differential diagnosis and treatment of red eye.Differential diagnosis: bacterial, viral and allergic (seasonal, spring and Vernal's). Differential Diagnosis of Red Eye. . Cornea Anatomy: Viral keratitis: herpes simplex and zoster. Acantameba and mycotic keratitis. Lagophthalmic keratopathy. neurotrophic keratopathy, degeneration and corneal dystrophy and keratoconus. Corneal transplant: lamellar endothelial perforator
2	Crystalline anatomy and suspensory apparatus and accommodation. Pathology of the crystalline: of transparency or cataract (etiological classification, age of onset and maturity). congenital character, senile cataract, position anomalies (slow actopia) marfan syndrome. Phacoemulsification cataract extraction techniques
2	Retina: macro and microscopic anatomy and vascularization. Retinal detachment: rhematogenous, exudative, Tractional. Prophylaxis of rhegmatogenous retinal detachment, Symptomatology of rhegmatogenous retinal detachment, diagnosis and hints of surgical treatment: ab extern, pneumoretinopexy and vitrectomy pica and vascularization. Retinal detachment: rhematogenous, exudative, Tractional. Prophylaxis of rhegmatogenous retinal detachment, Symptomatology of rhegmatogenous retinal detachment, diagnosis and therapy: surgical treatment: ab external, pneumoretinopexy and vitrectomy. Retinoblastoma
2	Anatomy and pathology of ocular hydrodynamics: glaucoma: classification: simple chronic glaucoma (diagnosis, symptoms and therapy) or open angle glaucoma, congenital glaucoma (diagnosis, symptoms and therapy) ocular hypertension, secondary glaucoma (facolytic, post uveitis, neovascular) acute glaucoma: symptoms and diagnosis and therapy. Surgical therapy of glaucoma
2	Age-related macular degeneration: physiopathology of the retina of the pigment epithelium and formation of drusen. Risk factors. Classification: Dry and Wet. Classification of wet forms: topographic (sub, juxta or extrafoveal) or etiopathological (classic occult and mixed). Diagnosis. symptomatology and therapy.Ppathology of the vitreous retinal interface: macular hole, lamellar hole, pucker. Hereditary diseases of the retina: retinitis pigmentosa and cone dystrophy
2	Causes and classification of refractive defects: myopia, hyperopia and astigmatism and their correction. Presbyopia accommodation. Amblyopia and its correction. Notes on correction with refractive surgery
2	Vascular pathology of the retina: venous and arterial occlusions (central and branch), etiopathogenesis, symptomatology, diagnosis and therapy. Diabetic retinopathy: etiopathogenesis. Classification Diagnosis, symptomatology, laser and surgical therapy. Complications of diabetic retinopathy. Diabetic macular edema: classification, diagnosis and therapy
2	Retinopathy of premature babies (ROP): etiopathogenesis, classification (I, II, III, IV stage), diagnosis and therapy

2	Anatomy of the Uvea and Classifications of Uveitis: anatomical, pathology and clinic. Symptoms Diagnosis and therapy of anterior, intermediate and posterior uveitis. Benign tumors of the choroid: iris and choroidal nevus and hemangioma of the choroid. choroid melanoma. Symptoms Diagnosis and therapy
2	Alteration of ocular motility with classification of strabismus (according to the angle; according to the time of onset; according to the direction of the deviation. Complications of strabismus, amblyopia suppression of diplopia. Main diagnostic techniques of strabismus.
2	Pathology of the orbit basedow ophthalmopathy and orbital cellulitis. pathology of the eyelids and tear ducts: Inflammatory pathology of the eyelids: sty, chalazion, blepharitis ,. Abnormality of eyelid position: ectropion and entropion; Anatomy, physiology and pathology of lacrimation; and tear outflow; chronic and acute dacryocystitis
2	Definition of the most frequent diseases of the optic nerve: Aetiopathogenesis Classification and clinic. optic neuritis Pathologies of the optic pathways (chiasmatic, retrochiasmatic alterations). Stasis papilla. Study of direct and consensual pupillary reflexes
2	Main instrumental investigations widely used in the ophthalmological field (examination with slit lamp, tonometry, fluorangiography, visual sampling, optometry, etc ..): techniques and principles
2	Retinal diseases in the main systemic diseases: diabetic and hypertensive retinopathy
2	Causes of low vision in childhood: retinoblastoma