

Odessa National Medical University
Faculty of medicine, international
Department of Ophthalmology

Course syllabus
PLASTIC AND RECONSTRUCTIVE SURGERY
IN OPHTHALMOLOGY

Extent	4 credits / 120 hours
Semester, year of study	IV semester, 2 year of study
Days, time, place	According to the schedule in the classrooms of the Department of Ophthalmology: st. Olhivska, 4; 49/51 French Boulevard.
Teacher (-s)	Liudmyla Vilenivna Venger, Doctor of Medicine., professor, head of the department of ophthalmology Nataliya Valeriyivna Konovalova, Doctor of Medicine, senior research associate, Associate Professor of Ophthalmology Department
Contact phone number	+380507775529 +380676635779
E-mail	lyudmyla.venger@onmedu.edu.ua kvnkonovalova@gmail.com
Workplace	Office of the head of the Department of Ophthalmology, str. Olhivska, 4. Teacher's room, 49/51 French Blvd.
Consultations	<i>Face-to-face consultations:</i> Thursday - from 13.00 to 15.00; Friday - from 9.00 to 13.00. <i>Online consultations:</i> Thursday - from 13.00 to 15.00; Friday - from 9.00 to 13.00. <i>Microsoft Teams or through Telegram/Viber</i>

COMMUNICATION

Communication with graduate students is carried out through face-to-face meetings. In case of transition to distance learning, communication with graduate students will be carried out using e-mail and programs: Microsoft Teams, Moodle, Telegram and Viber.

COURSE ABSTRACT

Subject of discipline study

The subject of study of the academic discipline is an in-depth study of plastic and reconstructive surgery in ophthalmology, the main task is to prepare a graduate student who, after mastering the basic questions of theory and practice of all sections of ophthalmology, studies the basics of plastic and reconstructive surgery of the eyeball and its appendages, starting with plastic of eyelids, ending with complex reconstructive operations on the membranes of the eye.

Course prerequisites and post-requisites (Place of the discipline in the educational program)

The study of the academic discipline «Plastic and reconstructive surgery in ophthalmology» is based on previous (providing) disciplines (student course): is based on in-depth study by postgraduate students of normal anatomy, histology, cytology and embryology, operative surgery and topographic anatomy, pathological anatomy, ophthalmology, otolaryngology, surgical stomatology and integrates with these disciplines; aimed at deepening knowledge of the basic methods of plastic and reconstructive operations on various areas of the orbit, eyeball, management of the early and late postoperative periods; promotes a deeper study of maxillofacial surgery by graduate students, which involves the integration of teaching with this discipline and the formation of skills to apply knowledge of ophthalmology in professional activities.

The purpose of the course

The purpose of teaching the academic discipline «Plastic and reconstructive surgery in ophthalmology» is the training of highly qualified specialists who are capable of competently solving complex problems in the field of professional and research innovation activities when planning and performing their own research, forming and developing their competence in accordance with professional standards; acquisition by each student of theoretical knowledge and practical skills regarding the main issues related to the provision of care to patients with congenital, age-related and post-traumatic defects of the organ of vision and its appendages.

Tasks of the discipline:

- acquisition and deepening of a set of knowledge, abilities, skills and other competencies sufficient for the production of new ideas, solving complex tasks in ophthalmology;
- practicing the skills and abilities of analyzing the results of ophthalmological research;
- conducting one's own scientific research that solves an actual scientific task in ophthalmology, the results of which have scientific novelty, theoretical and practical significance;
- mastering the methodology of scientific and pedagogical activity;
- master the ability to organize and conduct training sessions;
- acquisition of skills and abilities in educational-methodical and educational work;
- to acquire skills in using modern information technologies in teaching ophthalmology.

Expected results

According to the results of studying the discipline, graduate students should

know:

- goals and objectives of the discipline at the current stage. History and stages of development of domestic plastic and reconstructive ophthalmic surgery. The history of the Odessa school of plastic surgery in Ukraine, its contribution to the development of reconstructive surgery of the eye and its appendages;
- anatomical features of tissues of the orbit;
- etiology, pathogenesis and classification, clinical picture of pathology of eye appendages;

- indications and contraindications for plastic and reconstructive operations;
- risk factors for complications, timing of reconstructive and plastic interventions.
- methods of plastic surgery in ophthalmic surgery. Plastic with local fabrics. Filatov's method of stepping stem.
- free transplantation of autotissues. Morphological characteristics of transplanted tissues. Types of tissue transplantation: plastic with local tissues, flaps on the skin peduncle. Alloplasty. Methods of replacement and elimination of fabric defects.
- classification of defects and deformations of the eyelids, conjunctival cavity, orbit.
- plastic surgery for blepharoptosis.
- plastic and reconstructive surgery for lagophthalmos.
- Plastic surgery of the conjunctival cavity in case of anophthalmia. Methods of operative interventions.
- plastic surgery of age-related changes in the eyelids. Types of operations, features of the postoperative period, possible complications and their prevention. Plastic of sclera during reconstructive operations of the eye.
- keratoprosthesis. Methods and features of operations. Modern keratoprostheses.
- iridoplasty. Types of congenital iris defects. Indications for operative interventions.
- reconstructive operations for iris injuries. Methods of closed iridoplasty. Postoperative rehabilitation and prevention of complications.
- classification of burns of the eyeball and its appendages.
- types of operations for eye burns. Possible complications and their prevention.
- classification of tumors of the organ of vision.
- types of operations for tumors of the eyeball and its appendages. Indications for evisceration, exenteration.
- complications during and after reconstructive operations, their prevention and treatment.

be able:

- analyze the results of the patient's ophthalmological examination.
- to analyze structural and functional relationships and the sequence of stages of general pathological processes in ophthalmology.
- analyze and draw conclusions about the etiology and pathogenesis of functional disorders in eye diseases.
- identify congenital and acquired defects of the eye and its appendages.
- demonstrate mastery of the moral and deontological principles of a medical specialist and the principles of professional subordination in surgery.
- apply the basic principles of asepsis, antiseptics and analgesia.
- perform any type of local anesthesia in the area of the orbit.
- collect anamnesis and conduct a clinical examination of the patient with a defect or deformation of the tissues of the head and neck, correctly prepare the medical history, establish a diagnosis and draw up a treatment plan.
- predict complications during and after surgical interventions
- carry out primary surgical treatment of the wound.
- provide assistance to the patient in case of fainting, collapse, shock.
- provide assistance to a patient with Quincke's edema, anaphylactic shock.

- make an extract from the medical history correctly.
- correctly determine the period of incapacity for work of a patient with a defect or deformation of the eye and its appendages and draw up a sick-leave.
- apply monocular and binocular blindfold correctly.
- to master the technique of instillation of eye drops, application of ointment for the eyelids.
- to master the technique of conducting parabolbar and retrobulbar injections.
- to have the skills of microsurgical suturing of the edges of the surgical wound.
- interpret the principles of postoperative treatment and rehabilitation of patients with damage to the appendages of the eye.

COURSE DESCRIPTION

Forms and methods of education

The course is taught in the form of seminar classes (60 hours), as well as through the organization of independent work of graduate students (60 hours); total - 120 hours (4 credits).

Teaching a selective academic discipline «Plastic and reconstructive surgery in ophthalmology» *in practical classes* is provided by methodical developments, visual teaching aids for each lesson (presentations, videos), information resource of the department, structured algorithms of skill control.

Individual work when studying a selective academic discipline, is provided by methodical developments for independent work, visual teaching aids (videos, presentations), the information resource of the department, structured algorithms of skill control.

Final control is not conducted, the study of the discipline ends with a credit at the last practical lesson.

In the process of conducting seminar classes, the following teaching methods are expected to be used:

- according to the dominant means of education: verbal, visual;
- drawing up graphic schemes;
- solving situational problems;
- discussions on problem situations;
- individual control interview.

Content of the academic discipline

Topic 1. History and stages of development of plastic and reconstructive surgery in ophthalmology.

Topic 2. Defects of eyelids, conjunctival cavity, orbit.

Topic 3. Methods of plastic surgery in ophthalmic surgery.

Topic 4. Blepharoplasty.

Topic 5. Plastic surgery for blepharoptosis.

Topic 6. Plastic and reconstructive surgery for lagophthalmos.

Topic 7. Plastic surgery of the conjunctival cavity with anophthalmia.

Topic 8. Plastic surgery for age-related changes in the eyelids.

Topic 9. Plastic and reconstructive surgery of lacrimal organs.

Topic 10. Plastic and reconstructive surgery of corneal damage

Topic 11. Plastic of sclera during reconstructive eye operations

Topic 12. Keratoprosthesis.

Topic 13. Iridoplasty

Topic 14. Plastic and reconstructive surgery for burns of the eyeball and its appendages.

Topic 15. Plastic and reconstructive surgery for tumors of the eyeball and its appendages.

List of recommended literature:

a) basic:

1. Ophthalmology: textbook / O. P. Vitovska, P. A. Bezditko, I. M. Bezkorovayna et al.; edited by O. P. Vitovska. - Kyiv: AUS Medicine Publishing, 2017. - 648 p. ISBN 978-617-505-598-4

2. Eye Diseases. Course of lectures: textbook / G. E. Venger, A. M. Soldatova, L. V. Venger; edited by V. M. Zaporozhan. - Odessa: Odessa Medical University, 2005. – 157p.

3. Ophthalmology: textbook. / Gerhard K. Lang, edited by J. Amann, O. Gareis, Gabriele E. Lang, Doris Recker, C.W. Spraul, P. Wagner. - Thieme Stuttgart. New York, 2000. - 604 p. ISBN 0-86577-936-8.

4. ABC of Eyes, Fourth Edition: textbook / P. T. Khaw, P. Shah, A. R. Elkington. - by BMJ Publishing Group Ltd, BMA House, Tavistock Square, London, 2005. - 97 p. ISBN 0 7279 1659 9.

5. Common Eye Diseases and their Management: textbook / N. R. Galloway, W.M.K. Amoaku, P. H. Galloway and A. C. Browning; -Springer - Verlag London Limited, 2006. – 208 p. ISBN 1-85233-050-32.

6. Ophthalmology at a Glance: textbook / JANE OLVER, LORRAINE CASSIDY; - by Blackwell Science Ltd a Blackwell Publishing company, USA, 2005. -113 p. ISBN-10: 0-632-06473-0.

7. Atlas of Glaucoma. Second edition: textbook / Neil T. Choplin, Diane C. Lundy. - Informa healthcare, United Kingdom, 2007. -364 p. ISBN-10: 1841845183.

8. EYE Atlas. Online Atlas of Ophthalmology. / All rights Reserved, Oculisti Online. Copyright 2001. -408 p.

9. Офтальмологія: підручник / Г. Д. Жабоедов, Р. Л. Скрипник, Т. В. Баран та ін.; за ред. чл.-кор. НАМН України, проф. Г. Д. Жабоедова, д-ра мед. наук, проф. Р. Л. Скрипник. – К. : ВСВ „Медицина”, 2011. – 424 с.

10. Офтальмологія: практикум / Г. Д. Жабоедов, В. В. Кіреєв; за ред. чл.-кор. НАМН України, проф. Г. Д. Жабоедова, – К. : ВСВ „Медицина”, 2011. – 280 с.

11. Г. Ю. Венгер, А. М. Солдатова, Л. В. Венгер. Офтальмологія. Курс лекцій. – Одеса: Одеський медуніверситет, 2010.- 180 с.

12. Фісталь Е. Я. Пластична хірургія / Фісталь Е.Я. – Київ : Медицина, 2010. – 375 с.

13. Будова зорової системи людини: навчальний посібник / В. В. Віт. 3-е видання. - Одеса: Астропринт, 2018. - 664 с.: іл.
14. "Патологія ока, його придатків та орбіти" Том 1, 2.: монографія / В.В. Віт. – Одеса: Астропринт, 2019. -1866 с.
15. Кератопротезування: монографія / С.А. Якименко; ДУ «Інститут очних хвороб і тканинної терпії ім. В. П. Філатова НАМН України». - Одеса: «СІМЕКСПРИНТ», 2018. - 164 с.: іл.
16. "Офтальмологічна загадка - Птерігіум": монографія / Мальцев Е.В., Усов В.Я., Крицун Н.Ю. – Одеса: Астропринт, 2020. -154с.

б) additional:

1. Сторінки нашої історії: До 80-річчя ДУ " Інститут очних хвороб і тканинної терапії ім. В. П. Філатова НАМН України» / Н. Коваленко. - Одеса: Бондаренко М. А., 2018.- 386 с.: мал.
2. "Опіки очей та їх лікування": монографія / Якименко С.А. - Одеса: Чорномор'я, 2020. -284 с.
3. Г. Е. Венгер, С. А. Рыков, Л .В. Венгер. Реконструктивная хирургия радужной оболочки. – Киев: Логос, 2006. – 255 с.
4. "Ретинобластома": монографія /під ред. Н.Ф. Бобрової. – Одеса: Видавничий центр, 2020. -324 с.
5. "Неонатологія" у 3 томах: монографія / Пасечнікова Н.В., Кацан С.В., Знаменська Т.К., Антипкін Ю.Г., Аряєв М.Л. - Львів, Марченко Т.В., 2020,- 455 с.

Information resources

1. National Scientific Medical Library of Ukraine <http://library.gov.ua/>
2. National Library of Ukraine named after V.I. Vernadskyi <http://www.nbu.gov.ua/>
3. Drug Interaction Prediction Resource (based on FDA guidance, in English) URL: <http://www.drugs.com>
4. Institutional Repository of Odessa National Medical University <https://repo.odmu.edu.ua/xmlui/>
5. Electronic database of scientific publications of the National Library of Medicine of the US National Institutes of Health; https://library.gov.ua/svitovi-e-resursy/dir_category/general/
6. Educational portal of O.O. Bogomolets NMU <http://nmuofficial.com/zagalni-vidomosti/biblioteky/>
7. Online platform of evidence-based clinical protocols of the Ministry of Health of Ukraine <https://guidelines.moz.gov.ua/documents>

ASSESSMENT

Current control is carried out in seminar classes in accordance with formulated tasks on each topic. When evaluating educational activities,

preference is given to standardized control methods: oral interview, solving typical and atypical clinical situational problems; control of practical skills; discussions, reports.

Assessment of current discipline control:

The value of the rating **«excellent»**: a graduate student shows special creative abilities, knows how to independently acquire knowledge, finds and processes the necessary information without the help of a teacher, knows how to use the acquired knowledge and skills to solve problems, is able to produce innovative ways of solving problems, convincingly argues answers, independently reveals his own gifts and inclinations.

The value of the rating **«good»**: the graduate student has a fluent command of the studied volume of material, applies it in practice, freely solves exercises and problems in standard situations, independently corrects the mistakes made, the number of which is insignificant.

The value of the rating **«satisfactory»**: a graduate student is able to master a significant part of the theoretical material, but mainly in a reproductive form, demonstrates knowledge and understanding of the main provisions, can analyze the educational material with the help of the teacher, correct errors, among which there are a significant number of essential ones.

The value of the rating **«unsatisfactory»**: the graduate student has the material at the level of individual fragments, which constitute a small part of the educational material.

At the end of the study of the discipline, the current success rate is calculated as the average current score, i.e. the arithmetic average of all grades received by the graduate student on a traditional scale, rounded to two decimal places.

Individual work

Assessment of the independent work of graduate students and applicants, which is provided for in the topic along with classroom work, is carried out during the current control of the topic in the corresponding classroom session.

Forms and methods of final control

The study of the academic discipline ends with a test. Graduate students (seekers) who have not missed classes or completed missed classroom classes and have an average grade of at least 3.00 will receive credit.

COURSE POLICY

Deadlines and Rescheduling Policy

Tasks must be completed on time according to the deadline. For untimely completion of the assignment, the graduate student receives an unsatisfactory grade. If the student of higher education was absent from classes for any reason, then the practice is carried out within the deadlines set by the teacher in accordance with the «Regulations on the Organization of the Educational Process at ONMedU» (link to the regulations on the university's website <https://onmedu.edu.ua/wp-content/uploads/2020/01/osvitnij-proces.pdf>). Reassembly is carried out in accordance with the approved schedule.

Academic Integrity Policy

The policy of the educational component is based on the principles of

academic integrity (link to the regulations on the university's website <https://onmedu.edu.ua/wp-content/uploads/2020/07/polozhennja-pro-dobrochesnist.pdf>) and is determined by the system of requirements that the teacher presents to the student when studying the educational component:

- ♦ independent performance of educational tasks, tasks of current and final control of learning results (for persons with special educational needs, this requirement is applied taking into account their individual needs and capabilities);
- ♦ references to sources of information in case of use of ideas, developments, statements, information.

Attendance and Tardiness Policy

Attendance at lectures and seminars is mandatory to obtain a satisfactory grade. If you are late for more than 15 minutes, the lesson is considered missed and you need to make up for it.

Mobile devices

During classes, the use of a smartphone, tablet or other device for storing and processing information is allowed only with the teacher's permission.

During any form of control, the use of mobile devices and their accessories is strictly prohibited.

Behavior in the audience

During classes, it is allowed to: leave the audience for a short time if necessary and with the teacher's permission; take photos of presentation slides; take an active part in the lesson.

The following values should be cultivated while in the audience: respect for colleagues; tolerance for others; receptivity and impartiality; argumentation of agreement or disagreement with the opinion of other participants in the discussion, as well as one's own opinion; respecting the dignity of the opponent's personality during communication; compliance with the ethics of academic relationships.