# МЕДИЦИНСКИ УНИВЕРСИТЕТ - ВАРНА "Проф. д-р Параскев Стоянов"

Ул."Марин Дринов" 55, Варна 9002, България Тел.: 052/ 65 00 57, Факс: 052/ 65 00 19 e-mail: uni@mu-varna.bg, www.mu-varna.bg



MEDICAL UNIVERSITY - VARNA "Prof. Dr. Paraskev Stoyanov"

МЕДИЦИНА

55, Marin Drinov Str., 9002 Varna, Bulgaria Tel.: +359 52/ 65 00 57, Fax: + 359 52/ 65 00 1 e-mail: uni@mu-varna.bg, www.mu-varna.b

**FACULTY OF MEDICINE** 

Approved:

Dean:

(Prof. Yoto Yotov, MD, R)

# **SYLLABUS**

# IN Surgery

Specialty	MEDICINE
Educational - qualification degree	master
Organizational form of education	full-time
Auditorial activity (Lectures/Seminars)	255 (105/150)
Extra-auditorial activity	45
ECTS- credits	10
Discipline type	compulsory
Semester/s of education	VII, VIII, IX и X
Semester of examination	X
Developer(s) of the Syllabus:	Assoc. Prof. Alexander Zlatarov, MD. PhD.
	Assoc. Prof. Dr. Vasil Bozhkov MD.PhD. DSc.

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#### ANNOTATION

#### Aims of the course

The objectives of surgical training cover both theoretical knowledge and practical skills in the diagnosis, treatment and management of various surgical diseases. The main objectives of surgical training are:

- Acquire theoretical knowledge of surgical diseases: students and trainees should understand the basics of various surgical diseases and conditions. This includes knowledge of the etiology, pathophysiology, and clinical presentation of diseases such as appendicitis, cholecystitis, trauma, cancer, and other surgical problems.
- Diagnostic Skills Development: Training should provide the skills to make a correct diagnosis through history taking, clinical examination, laboratory tests, and imaging studies (x-ray, ultrasound, CT, MRI, etc.). This includes the interpretation of the results of various diagnostic tests.
- Choosing the appropriate treatment: training should develop the skills to make the correct choice of treatment depending on the specific needs of the patient whether surgery, medication or other interventions are to be used. This includes knowledge of different therapeutic approaches and the choice between different surgical methods.
- Mastery of surgical techniques: Students should learn basic surgical techniques such as wound dressing, insertion of NGS, rectal tux.
- Pre- and post-operative observation skills development: This course also includes learning the rules of patient preparation before surgery (body preparation, laboratory tests, anesthesia) and post-operative care (observation, infection prevention, pain relief, recovery).
- Complication Prevention and Management Training: It is important that students acquire the skills to recognize and manage possible complications after surgery, such as infections, bleeding, thromboembolism, sepsis, etc.
- Ethics and Safety: Training should include ethical principles of surgery, especially in relation to surgical interventions and treatment decision making. Special attention is also given to safety during surgery sterility, use of surgical instruments, communication within the team and proper treatment of the patient.
- Interdisciplinary work and communication: Surgery requires effective communication and teamwork with other medical professionals (anesthesiologists, nurses, laboratory specialists, etc.). Therefore, surgical training includes developing these skills.
- Development of research skills: In modern surgical training there is also an emphasis on research and innovation in surgical diseases, such as new surgical techniques, improved treatment methods and technology.
- Preparation for Independent Practice: This training aims to prepare students to perform basic surgical manipulation and clinical decision making independently.

The objectives of surgical training seek to ensure that trainees will not only be able to diagnose surgical diseases and refer patients to a specialist surgeon, but also to apply best medical practices in accordance with the latest scientific advances.

Outcomes for st	cudents at the end of the course:
Competences	
Competence group	1. Patient Care that is compassionate, appropriate, and effective for treating health problems and promoting health.
Knowledge	Knowledge of curriculum material
Skills	<ul> <li>To collect important and accurate patient information.</li> <li>To counsel patients and family members.</li> <li>To perform clinical examination</li> <li>To know the indications for procedures.</li> <li>Perform basic surgical manipulations</li> <li>To competently perform all medical procedures required within their scope of practice.</li> </ul>
Competence group	<ol> <li>Medical Knowledge about established and evolving biomedical, clinical, and cognate (eg, epidemio-logical and social-behavioral) sciences and the application of this knowledge to patient care.</li> </ol>
Knowledge	- Knowledge of curriculum material
Skills	<ul> <li>To acquire new scientific and clinical knowledge.</li> <li>Apply a research and analytical approach to clinical and scientific problem solving.</li> <li>Apply medical and scientific knowledge to clinical situations.</li> </ul>
Competence group	3. Practice-Based Learning and Improvement that involves investigation and evaluation of their own patient care, appraisal, and assimilation of scientific evidence, and improvements in patient care.
Knowledge	Acquisition of new scientific and clinical knowledge.
Skills	<ul> <li>Examine and evaluate patient care practices (including their own).</li> <li>Evaluate and assimilate scientific evidence,</li> <li>Apply evidence-based medicine.</li> <li>To improve medical practice.</li> </ul>
Competence	4. Interpersonal and Communication Skills that result in
group	effective information exchange and teaming with patients, their families, and other health professionals.
Knowledge	To work effectively as a member of a healthcare team.
Skills	<ul> <li>Demonstrate professional conduct and responsibility.</li> <li>Demonstrate humanism and cultural competence.</li> <li>Maintain emotional, physical and mental health.</li> </ul>

	Strive for continuous personal and professional growth.
Competence group	5. Professionalism, as manifested through a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population.
Knowledge	Ethical norms and rules in medicine
Skills	<ul> <li>Demonstrate professional conduct and responsibility.</li> <li>Demonstrate humanism and cultural competence.</li> <li>Maintain emotional, physical and mental health.</li> <li>Strive for continuous personal and professional growth.</li> </ul>
Competence group	6. Systems-Based Practice, as manifested by actions that demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively call on system resources to provide care that is of optimal value.
Knowledge	Ethical norms and rules in medicine
Skills	<ul> <li>To work effectively in a variety of settings related to their clinical specialty.</li> </ul>

Key competencies for lifelong learning <sup>1</sup> , that the discipline develops:	
Literacy competence Literacy is the ability to identify, understand, express, create, and interpret concepts, feelings, facts and opinions in both oral and written forms, using visual, sound/audio and digital materials across disciplines and contexts. It implies the ability to communicate and connect effectively with others, in an appropriate and creative way.	X
Multilingual competence  This competence defines the ability to use different languages appropriately and effectively for communication. It broadly shares the main skill dimensions of literacy: it is based on the ability to understand, express and interpret concepts, thoughts, feelings, facts and opinions in both oral and written form (listening, speaking, reading and writing) in an appropriate range of societal and cultural contexts according to one's wants or needs.	
Mathematical competence and competence in science, technology, engineering  A. Mathematical competence is the ability to develop and apply mathematical thinking and insight in order to solve a range of problems in everyday situations. Building on a sound mastery of numeracy, the emphasis is on process and activity, as well as knowledge. Mathematical competence involves, to different degrees, the ability and willingness to use mathematical modes of thought and presentation (formulas, models, constructs, graphs, charts).  B. Competence in science refers to the ability and willingness to explain the natural world by making use of the body of knowledge and methodology employed, including observation and experimentation, in order to identify questions and to draw evidence-based conclusions. Competences in technology and engineering are applications of that knowledge and methodology in response to perceived human wants or needs. Competence in science, technology and engineering involves an understanding of the changes caused by human activity and responsibility as an individual citizen.	X

<sup>&</sup>lt;sup>1</sup> As defined in 2018 r. by the European Union Council (<a href="https://eur-lex.europa.eu/legal-content/BG/TXT/HTML/?uri=CELEX:32018H0604(01)&from=EN">https://eur-lex.europa.eu/legal-content/BG/TXT/HTML/?uri=CELEX:32018H0604(01)&from=EN</a>)

Digital competence Digital competence involves the confident, critical and responsible use of, and engagement with, digital technologies for learning, at work, and for participation in society. It includes information and data literacy, communication and collaboration, media literacy, digital content creation (including programming), safety (including digital well-being and competences related to cybersecurity), intellectual property related questions, problem solving and critical thinking.	X
Personal, social and learning to learn competence Personal, social and learning to learn competence is the ability to reflect upon oneself, effectively manage time and information, work with others in a constructive way, remain resilient and manage one's own learning and career. It includes the ability to cope with uncertainty and complexity, learn to learn, support one's physical and emotional well-being, to maintain physical and mental health, and to be able to lead a health-conscious, future-oriented life, empathize and manage conflict in an inclusive and supportive context.	X
Citizenship competence the ability to act as responsible citizens and to fully participate in civic and social life, based on an understanding of social, economic, legal and political concepts and structures, as well as global developments and sustainability.	
Entrepreneurship competence Entrepreneurship competence refers to the capacity to act upon opportunities and ideas, and to transform them into values for others. It is founded upon creativity, critical thinking and problem solving, taking initiative and perseverance and the ability to work collaboratively in order to plan and manage projects that are of cultural, social	

Competence in cultural awareness and expression involves having an understanding of and respect for how ideas and meaning are creatively expressed and communicated in different cultures and through a range of arts and other cultural forms. It involves being engaged in understanding, developing and expressing one's own ideas and sense of place or

#### Methods of education

lectures

or financial value.

- seminars
- practicals and laboratory exercises, practical and creative problem solving, case studies, consultations, discussions, work with scientific literature, regulatory documents, databases, analyses, presentations, work with patients under observation, medical documentation,.....

### Links with other courses from the curriculum of the specialty

Builds upon knowledge acquired in/Depends on:

Cultural awareness and expression competence

role in society in a variety of ways and contexts.

- o Human biology
- o Latin language with medical terms
- o Biochemistry
- Human physiology
- Medical ethics
- Pathophysiology
- General pathology
- General and operative surgery

## Necessary for the following disciplines:

o State Internship in Surgery

### Other related disciplines:

- o Oncology
- o Gastroenterology
- Clinical pathology
- o Microbiology
- Obstetrics and Gynaecology
- Clinical pharmacology
- o Forensic Medicine
- o Neurosurgery
- o Orthopaedics and Traumatology
- o Urology