One Step Educational Program for MD

(English medium)

Program title- One Step Educational Program for MD (English medium)

Education level - One step medical education

Given degree- Medical Doctor (MD)

Program volume: 360 ECTS credits(1 ECTScredit equals to 30 hours)

Learning language- English

English mediumMD program goals

MD program aims to bring up competitive qualified physicians with proper competences, who are ready for further postgraduate education and special training. The program also aims to prepare medical staff in according to demands from National Health Care System.

The program should provide:

- Medical education corresponding to progressive and current knowledge and technologies;
- Ability and motivation for the future physicians during the whole life;
- Preparation of medical staff using modern information and teaching technologies;
- Matchingof medical education to the demands and abilities of National Healthcare System.

Graduate from the English medium MD program at TSMU:

- Has knowledge in basic, clinical, behavioral and social sciences which are essential for medical practice;
- Has general clinical skills;
- Can evaluate and use properly obtained medical information for solving different clinical problems;
- Is able to assess health condition of each member of society and improve national health service on the basis of knowledge obtained in clinical, biomedical and behavioral sciences
- Can critically evaluate scientific and clinical news and utilize them to improve the clinical practice;

- Understands essentiality of continuous medical education and professional development

Requirements for involvement:

- Foreign Nationals with corresponding documentation should apply (send the documents) to the Ministry of Education and Science of Georgia. After approval from the Ministry they have right to start the undergraduate course.
- Georgian citizens are required to pass through the National Exams.

Learning and Teaching Methods and Evaluation System

Essential terms for teaching at the faculty of medicine are: integration of theoretical and practical teaching; development of clinical skills in virtual simulation centers and clinical environment. New technologies must have an advantage during the teaching. Teaching is student oriented which means students' active participation in the study process and involves case teaching, discussions, empiric teaching, seminars and projects.

Teaching forms used in study process:

- Interactive lectures, seminars, colloquiums
- Studying in clinical environment
- Simulators and moulages
- Performing a roll of patient or physician
- Laboratory teaching
- Presentations
- Participation in scientific research
- Practice

Employment Opportunities of Persons Graduated from One step Educational Program for MD (English medium)

Graduate from the program certified as a Medical Doctor is able to have a medical practice according to the regulations of particular country.

Research and academic practice in the theoretical or other fields of health care not related to independent medical practice;

The person certified as a Medical Doctor is able to take the course of the Doctoral Level or take the post-graduate professional training course.

Learning courses of the English medium MD program

	LEARNING COURSES	SEMESTERS	NUMBER OF CREDITS (ECTS)
	A/ MANDATORY SUBJECTS		
1	Biophysics and medical physics	I, II	9 (5+4)
2	Medical Chemistry	I, II	9
3	Medical Biology	I	4
4	Medical Parasitology	II	4
5	Human Normal Anatomy	I, II, III	18
6	Histology,Cytology and Embryology	II, III	11
7	Physiology	III, IV	11
8	Medical Biochemistry	III, IV	9
9	Mollecular and Medical Genetics	III, IV	7
10	Microbiology	IV, V	7
11	Topographycal Anatomy and Operative Surgery	IV, V	9
12	Pathological Anatomy	V, VI	9
13	Pathophysiology	V ,VI	8
14	Pharmacology	V, VI	9
15	Immunology	V	4
16	General Surgery	V, VI	6
17	Propedeutics of internal Diseases	V, VI	9
18	Radiology	V, VI	3
19	Internal Medicine (Integrative course, covers cardiology, pulmonology, gastroenterology, nephrology, reumatology, Allergology and clinical immunology, Hematology, Occupational medicine)	VII-X	24
20	Dermatology and Venerology	VII or VIII,	5
21	Neurology	VII or VIII	8
22	Pediatrics	VII or VIII	9

23	Infectious diseases	IX or X	6
24	Phtisiology	IX or X	2
25	Surgery (Integrative course, covers surgery surgery 1 and 2, urology, neurosurgery, child surgery, traumatology and orthop oncology)	VI-X	21
26	Obstetrics and Gynecoogy 1	VII or VIII	6
27	Oto-rhyno-laringology	VII or VIII	4
28	Ophtalmology	IX or X	3
29	Anesthesiology and Reanimatology	IX or X	2
30	Clinical Toxicology	IX or X	2
31	Psychiatry	IX or X	6
32	The Basics of Psychology ; Clinical Psychology	III, VIII	4
33	Hygiene and Medical Ecology	VI	4
34	Health Promotion	VII	2
35	Epidemiology with Bioststistics	VII or VIII	4
36	Public Health	IX or X	5
37	Forensic Medicine	IX or X	5
38	Clinical Skills (1,2,3,4)	IV, VI, VII-VIII, X	8
39	Communicative Skills (1and 2)	I, IV	4
40	Foreign Language 1,2 and 3)	I, II, III	10
41	Professional Latin Langiage	I	2
43	History of Medicine	I	2
44	Bioethics	III	2
45	Scientific Research	IV	3
	Clinical Clerkships	XI-XII	
46	Therapy Integrative course - covers: The management of inte diseases and basics of geriatrics , family medicine)		

			20
47	Surgery		7
48	Pediatrics (integrative course –covers: Child and adolescent medicine, child infectious diseases, child neurology)		11
49	Obstetrics and Gynecology		7
50	Clinical Radiology		3
51	Rehabilitation and Sport Medicine		3
52	Health Resort and Physiotherapy with Medical Tourism		2
53	Narcology		2
	B/ ELECTIVES		4
1	Laboratory Medicine	IX - XII	2
2	Reproductive health	IX - XII	2
3	Vascular Surgery	IX - XII	2
4	Rheumatology	IX - XII	2
5	Radiation Biology and radiogenic risks	IX - XII	2
	Total credits		360

Short content of the Learning Courses

Biophysics and medical physics

The course builds physical frame of mind and introduces students to understanding how basic physical principles can describe and be vary useful tool in explaining biological processes on molecular level. The course gives students insight into physical principles that he would need for better understanding of anatomy, biochemistry, physiology, histology and pathology. On the other hand this course is in compliance with chemistry and biology and gives different prospective to the same subjects. Topics to study will include structure and function of the biological membranes, transport of energy and mass in biological systems and influence of external energy sources on them, as well as basic electromagnetic , optical and acoustic properties of human body. The course intends to explain how basic physical principles that stand behind all diagnostic methods can help in obtaining better images and in better utilization of equipment, as well as protection of patients and personal. Through laboratory works students will learn to handle with simple measuring devices that are almost

always part of equipment that they will be working with to collect data and interpret measurement results.

Medical Chemistry

The course of medical chemistry is composed in such a way as to enable students to become familiar with chemical structures, chemical and energetic changes. The course content comprises properties of solutions, colloid systems, biologically significant inorganic substances, structure and properties of organic compounds, equilibrium and kinetics of chemical reactions .

The practical part of the course covers the preparation of solutions, pH and buffers, colloidal disperse systems and methods in analysis of biological materials

Medical Biology

The subject Medical Biology is aimed to present to students the basics of the contemporary knowledge about biological processes bearing in mind their medical orientation and their future work in medical practice which is changing and improving in accordance to the scientific progress in biomedical sciences. Therefore modern biological concepts are presented to students in an integrated manner using important medical examples. After mastering the subject medical biology students should be able to follow new trends in biomedical sciences important for full understanding of preclinical and clinical subjects and latest achievements in diagnostics and therapy.

Medical biology covers cell biology, molecular biology and developmental biology. The teaching is performed through lectures and seminars. In lectures the students can learn about the most important old and new biological discoveries and concepts and their significance for human diseases and their treatment. In seminars students are encouraged to actively discuss and solve problems related to human diseases.

Medical Parasitology

The course of Medical Parasitology includes medical ecology and studies the impact of ecological factors on normal functioning of human organism. It studies the basic principles of the origin and development of anthropo-ecological systems. Parasitic diseases represent a major global problem nowadays, especially in the countries of the third world, where millions of people die due to parasitic disease annually. The course of Medical Paeasitology studies the biology of parasites, united in various systematic groups: their classification, morphologic characteristics, biochemical and physiologic aspects of their vital activity, their life cycle in host organisms, including humans, as well as pathologic mechanisms of diseases caused by the parasites. The modern approach towards these questions assumes the use of recent data of molecular biology. The aim of the course is to give students basic knowledge, which will

help them to better understand the concepts of related pre-clinical and clinical subjects. Due to this the emphasis is put on the correlation between biological and clinical aspects – and the discussion of basic concepts of diagnosis and prevention of parasitic diseases.

Human Normal Anatomy

The aim of the course in Anatomy is to provide the student with knowledge of the structure of the human body and enable him to fully understand normal and pathological human macromorphology. The main objective of the gross anatomy course is to provide the students with an anatomical framework that will be enduring so that in the future they can recall the anatomy of the patient when required.

The task of the educational process is to enable the student to comprehend the structure of the human body as a whole constituted of individual interconnected systems and to endow him with a competence in recognizing organs, systems and regions of the human body through personal experience in dissecting a cadaver and examining anatomical preparations.

The content of the course consist of systemic anatomy of the human body with the emphasis on clinical aspects of individual elements, theoretical and practical lessons on learning about bones, joints and muscles, abdominal organs, heart and practical lessons, as well as the central and peripheral nervous system and the senses.

Students are also introduced to imaging modalities and the purpose of this aspect of the course is to reinforce the gross anatomy and assist in the students' ability to learn the subject matter.

Histology, Cytology and Embryology

The course offers a student a) cytological (ultrastructural , cytochemical and functional) features of differently differentiated cells in the human body; b) an insight into structural and functional relation of basic tissues and organ systems (special cytology, general histology, systemic histology) c)a theoretical, as well as clinical approach to basic concepts of reproduction, early development of human embryo, development and functions of embryonic membranes, as well as development of certain organs and organ systems and their most common and most important developmental anomalies. The whole body of knowledge covered by this course offer a basis for understanding normal functioning of organism and its pathological changes together with various clinical phenomena the student encounters in his/her study of clinical medicine.

Besides being introduced to the fundamental clinical principles referenced above, students should become acquainted with fundamental classical and the most recent microscopical methods in relation to embryonic development of human body.

The teaching is performed through lectures, seminars, laboratory sessions. Laboratory sessions include the study of glass slides under the light microscope.

Physiology

Main aims of human physiology course (Human **Physiology I** and Human **Physiology II**, see later) as an academic subject is the study of human functions in good health, interconnection of those functions, regulations of the human body and physiological integration of the organ systems to maintain healthy conditions in unstable environment and in the processes of evolution and individual development. Physiological function of the body and its parts is to achieve life sustaining effect that refers to the cellular metabolism, exchanges of matter, energy or information with the environment.

To make the learning process easier during the course, each body system is studied separately, taking into consideration that the basics of the medico-biological thinking is that all body organ systems contribute to the homeostasis of the entire organism. The basis of integrated medico-biological approach to understanding of body functions is that the functions of all organs and systems are interrelated, and all this complex of regulatory mechanisms ensure not only dynamic equilibrium within the human body, but also the adjustment of human body to constantly changeable physico-chemical and social environmental conditions.
The goal of Human **Physiology I** is study of cellular functions (excitability, conductivity, contraction, transmission) and regulatory systems (nervous, hormonal) in healthy body.
The goal of Human **Physiology II** is study of functional systems and their interrelations in healthy body.

Medical Biochemistry

The course aims to provide an advanced understanding of the core principles and topics of Biochemistry and their experimental basis. and to enable students to acquire a specialised knowledge and understanding of selected aspects by means of a stem/branch lecture series and a research project. The major objectives of the *Medical Biochemistry* course are: to provide the first year medical students a solid foundation in the biochemical concepts which are needed for the practice of medicine. In addition, the course requires the students to use this material in problem solving.
The course content comprises: the molecular architecture of eukaryotic cells and organelles, including membrane structure and dynamics; the principles of bioenergetics and enzyme catalysis; the chemical nature of biological macromolecules, their three-dimensional construction, and the principles of molecular recognition; the metabolism of dietary and endogenous carbohydrate, lipid, and protein; the principles and major mechanisms of metabolic control and of molecular signalling by hormones; the control of cell proliferation; the organization , replication and repairment of the DNA in a genome; The transmission of genes between generations and possibility of errors; Natural polymorphism and genetic variations and their role in formation of mutant genes, inheritance of genetic errors;
The teaching is performed through lectures, seminars, laboratory sessions.

Mollecular and Medical Genetics (1 and 2)

Medical genetics has become part of the broader field of genomic medicine, which seeks to apply a large-scale analysis of the human genome to improve medical care. The aim of the course is to study the basic principles of molecular genetics, including the mechanisms of expression and regulation of human genes and their contribution in the development of various diseases; the concept of epigenetics; acquisition of basic knowledge in molecular and medical genetics and its implementation in theoretical and practical medicine; understanding of Mendelian monogenic and multifactorial inheritance patterns. To describe the main principle Population Genetics; Hardy Weinberg law. These are the topics, the knowledge and constant upgrade of which is essential for any healthcare professional. Based on the knowledge of the principles of molecular genetics and the physiological expression of various human genes the cause of many genetic diseases could be discovered in recent years.
The aim of the course is to give basic knowledge in molecular and medical genetics and enable students to use this information in theory and practice. The objective of the course is to study molecular, biochemical and cellular bases of genetic and multifactorial diseases, identify chromosomal abnormalities, so that future clinicians have understanding of the fine genetic mechanisms of many diseases and will be able to work out adequate preventive and treatment strategies.

Microbiology

The aim of the course is to provide students the main pathogenic properties of microorganisms, pathogenesis of diseases caused by microorganisms, basic principles of etiological diagnosis of infectious diseasesand the effect that antimicrobial agents have on microorganisms.
The content of the course includes basic data about the particular, most frequent pathogenic microorganisms – bacteria, viruses, fungi and parasites – (taxonomy, morphology, physiology, natural habitat); in depth pathogenic properties of the most frequent pathogens (obligatory and opportunistic), emerging pathogens; the way particular pathogen enters on/into human body, spreads within it, causes disease and exits from the human body; non-specific and specific mechanisms of host defense against infectious agents, specific prophylaxis of infections, normal human flora; classic and modern microbiological methods for isolation and identification of microorganisms, or identification of their antigens, DNAs, RNAs or metabolic products; antimicrobial agents, susceptibility and resistance of microorganisms to antimicrobial agents; basic principles of hospital hygiene and control of hospital infections.
lectures and practical laboratory training are teaching/learning forms.

Topographycal Anatomy and Operative Surgery

The aim of the study course is to teach students studying the body's structure by focusing attention on a specific part (e.g., the head), region (the face), or subregion (the orbit); examining the arrangement and relationships of the various systemic structures (muscles, nerves, arteries, etc.) within it; and then usually continuing to study adjacent regions in an ordered sequence. It’s also recognizes the body's organization by layers: skin, subcutaneous

tissue, and deep fascia covering the deeper structures of muscles, skeleton, and cavities, which contain viscera (internal organs). Many of these deeper structures are partially evident beneath the body's outer covering and may be studied and examined in living individuals via surface anatomy.

Pathological Anatomy

The course aims at providing students with knowledge on the pathology of diseases by exploring microscopic changes in organs and entire organisms and microscopic changes in cells and tissues, and by applying the acquired knowledge with the etiopathogenesis and clinical signs of disease. Students study typical morphological changes in cells, tissues, organs and organism, and practice using histological biopsy findings and autopsy results. They analyze clinical data and laboratory findings and compare and integrate clinical and pathological anatomy findings. General part of the course focuses on etipathogenetic factors and morphological changes of the adapted cells, impairments and cell death, inflammation and reparation, neoplasms, genetic disorders, diseases of the immune system, disorders of the bodily fluids and hemodynamics, infectious diseases, diseases developing in deficient conditions, environmental pathologicalchanges, children's diseases and aging diseases. Specific part of the course focuses on ethipathological factors and morphological changes related to individual body systems.

The teaching is performed through lectures, seminars, laboratory sessions. Laboratory sessions include the study of glass slides under the light microscope.

Pathophysiology

The aim of the course is to introduce the basic pathophysiological concepts and visions common to various group of diseases from the integral point of view. Pathophysiology combines theoretical, basic, experimental and clinical knowledge. This approach enables students to understand pathobiological foundations of the disease manifestations.
The content of the course comprises the fundamental notions of pathophysiological processes, the concepts of health and disease, etiology and pathogenesis, interdependence of noxious agents, organism and environment with the disease, patient and doctor, general etiological factors and pathogenetic mechanisms, biosynthesis and macromolecular functions disorders, dysfunctions of subcellular structures, inflammation, energy metabolism and biological substances turnover disorders, imbalance of bodily fluids, hormonal regulation disorders, dysfunction of neurovegetative regulation, shock , foundations of pain, consciousness disorders, immunopathophysiology, growth and developmental disorders, malignant growth, physical/ biological/chemical etiological agents, basics of pathophysiology of individual functional systems.
The final aim of pathophysiology is to achieve students competence for scientific reasoning on causes, development and manifestationspf the disease, in order to procure the correct reasoning on diagnosis, prevention and treatment of the diseases.

lectures, problem oriented seminars and practical laboratory training are teaching/learning forms.

Pharmacology

The aim of the course is to get students familiar with basic concepts of drugs, their characteristics and actions, toxicology and adverse drug reactions, that would enable students to successfully handle drugs in the course of patient treatment.
General pharmacology includes: drug administration, drug fate in the body. absorption, distribution, drug elimination and other pharmacokinetic characteristics, pharmacodynamic aspects and mechanisms of drug action, factors that modify drug action, drug toxicology and adverse drug reactions, drug discovery - preclinical studies and clinical trials, drug registration principles and control of registered drugs. Curriculum dealing with drugs in particular, grouped to their pharmacotherapeutic classification includes basic chemical and physical drug characteristics, drug fate in the body, particularly regarding absorption, distribution, biotransformation , excretion and other pharmacokinetic reactions, and drug indications in general outline. Main topics covered are: drugs acting on autonomic and central nervous system, cardiovascular drugs, drugs acting on urogenital system, drugs used to treat diseases of blood and hematopoietic organs, respiratory system and gastrointestinal tract, chemotherapeutics, hormones and vitamins. The teaching is performed through lectures, seminars, practical laboratory trainings.

Immunology

The aim of the course is to get students familiar with basic concepts of drugs, their characteristics and actions, toxicology and adverse drug reactions, that would enable students to successfully handle drugs in the course of patient treatment.
General pharmacology includes: drug administration, drug fate in the body. absorption, distribution, drug elimination and other pharmacokinetic characteristics, pharmacodynamic aspects and mechanisms of drug action, factors that modify drug action, drug toxicology and adverse drug reactions, drug discovery - preclinical studies and clinical trials, drug registration principles and control of registered drugs. Curriculum dealing with drugs in particular, grouped to their pharmacotherapeutic classification includes basic chemical and physical drug characteristics, drug fate in the body, particularly regarding absorption, distribution, biotransformation , excretion and other pharmacokinetic reactions, and drug indications in general outline. Main topics covered are: drugs acting on autonomic and central nervous system, cardiovascular drugs, drugs acting on urogenital system, drugs used to treat diseases of blood and hematopoietic organs, respiratory system and gastrointestinal tract, chemotherapeutics, hormones and vitamins. The teaching is performed through lectures, seminars, practical laboratory trainings..
The aim of the course is to provide students the conceptual and informational knowledge of the ability of higher organism, especially human, in recognizing and protecting from foreign

antigens due to providing the antigenic and genetic organism integrity and to provide students the ability to apply this knowledge to real-life situation in the future clinical work.
The course enables students to integrate the knowledge in immunology with a knowledge in physiology, histology, microbiology and parasitology, pathology, pathophysiology, oncology, infectology and epidemiology (vactination). The topics covered by the course include organization of immunological system; immunogenetic; physiology of immunological reaction; antigen, antibody and complement; humoral and cellular immunity; regulation of the immune response; immunological tolerance; transplantation and tumor immunology; immunological hypersensitivity; immunodeficiency; autoimmunity; modification of immunological reactivity; phylogenesis and ontogenesis of immune system.
The teaching is performed through lectures, seminars, problem-based small groups.

General Surgery

The subject of General Surgery I and II is the first step for all surgical subjects (propaedeutical course). Student will learn the general principles of surgery by participating in the care of patients in the operating room, on the ward and in the clinic. In addition to clinical experience, student will have a series of faculty presentations, covering the general principles of surgery as illustrated by diagnosis and management of common and important clinical presentations. The subject of General Surgery includes such important surgical topics as: aseptics and antiseptics, modern methods of diagnostics (endoscopy, ultrasonography, CT, MRI), bleeding and methods of arresting of bleeding, blood transfusion, blood substitute solutions, anesthesiology and resuscitation, types of surgical operations, general principles of traumatology, burn, frostbite, electrocution, purulent surgical diseases, surgical parasitology, general oncology, malformations, plastic and reconstructive surgery and transplantology.

Propedeutic of internal Diseases

The objective of this course is to provide students with basic skills related to history taking and physical examination of patients. Students working in a small groups under the supervision of physician instructor take medical histories and examine patients. They also prepare case histories and presentations and learn laboratory procedures through practical exercises. Students learn to perform a medical interview and physical examination. Analysis of findings and formulation of diagnostic probabilities from actual patient examinations are emphasized through case presentations. Students also learn how to develop appropriate communication skills and less passive in their role. They will also learn to record the pertinent information in a comprehensive standardized format.

Radiology

The objectives of the course are knowledge of Principles, Physical Basics and methods of Diagnostic, Therapeutic and Interventional Radiology. The course includes: Introduction. Radiology as a sphere of clinical medicine and historical overview.; Overview of Diagnostic Radiology Modalities, Types of Information; Physical basics and general information about X-rays; The basic types of X-Ray studies; The contrasts in X-Ray studies – concept and

methods; Physical basics and general information about CT; Physical basics and general information about Nuclear Medicine (In-Vivo, In- Vitro); The principle of information receiving, Types of information in Nuclear Medicine – Radiometry, Radiography, NM Scanning; Types of information in Nuclear Medicine – Scintigraphy, SPECT, PET; Physical basics and general information about Ultrasound; Physical basics and general information about Doppler Studies (Spectral, Color, Power); Physical basics and general information about MRI and Thermography; The Basic concept of Radiobiology; Physical basics and general information about Radiotherapy, possibilities in treatment of oncology and non-oncology patients .

Internal Medicine (Integrative course, covers cardiology, pulmonology, gastroenterology, nephrology, reumatology, Allergology and clinical immunology, Hematology, professional diseases)

The integrated course in internal medicine must provide opportunity for students to gain knowledge on diagnosing, early detection, managing and prevention of internal medicine diseases which are treated by means of conservative methods. Students should also get an inside into rehabilitation procedures of the impaired functions and learn how to solve the whole set of problems within the context of the primary health care.

Students should gain knowledge of and master skills and attitudes relevant for diagnosing, understanding of etiology, pathogenesis, managing , rehabilitation and prevention of the internal medicine diseases, through organized forms of theoretical teaching and practicals at bedside and ambulatory facilities. The teaching is performed through lectures, seminars and bedside practicals. Student will develop skills in diagnosis and management of the most common pathological entities: cardiovascular diseases, pulmonary diseases, diseases of the blood and hematopoietic organs , kidney diseases, gastrointestinal diseases, endocrine diseases, metabolic disorders and malnutrition, rheumatic and autoimmune diseases.

The teaching also comprises the preventive and social components of the internal medicine, together with the principles of the rehabilitation and assessment of the working capability of the patients.

Dermatology and Venerology

Diagnostics, treatment and prevention of skin and sexually transmitted diseases are highly important in general medical practice. The main goal of the course is students familiarization with principles of diagnostics, treatment and prevention of the most widespread skin and venereal diseases in children and adults, acquisition of skills which are necessary for future medical practice. After completion of the course a student should acquire the following knowledge: general information about skin morphology and physiology, principles of examination and laboratory screening in dermatology, general symptoms and main clinical syndromes in children and adults, relations of skin and mucosal diseases with general pathology, main principles of topical and general treatment and prevention, general

information about sexually transmitted diseases, general principles of laboratory screening, diagnostic, treatment and management of this type of diseases, general principles of tactics in the case of contagious skin and venereal diseases.

Neurology

The goal of the course is: to gain the basic knowledge about functional anatomy of nervous system and main neurological diseases; to ain skills of neurological examination, topical diagnosis and interpretation of symptoms and syndromes. To give the knowledge of principles of topical diagnosis of CNS pathology, Introduce with modern appearances in etiology, pathogenesis, diagnose, treatment of nervous system's disorders and management of neurological emergency situations. The student must demonstrate skills that define good medical practice and a successful doctor.

Pediatrics

The aim of the pediatrics course is to give the student knowledge on etiology and pathogenesis of diseases presenting in childhood and to make him/her able to diagnose, manage and prevent these diseases, as well as for rehabilitation of impaired functions. This aim should be reached through theoretical and practical forms of teaching which make possible getting specific knowledge , skills, habits and attitudes sufficient for proper health care for children in primary care. These acquirements present adequate basis for possible future education in pediatrics, as well.

The curriculum encompasses pediatric propedeutic, clinical pediatrics, social and preventive pediatrics. Clinical pediatrics comprises specific characteristics of epidemiology, etiopathogenesis , symptomatology , diagnostics, therapy and prophylaxis of most common, in particular acute, pathological conditions in childhood. Main topics are development and growth, inheritance, congenital anomalies, inborn errors of metabolism, neonatal pathology, acute and chronic nutrition disorders of infants and small children, hypovitaminoses, acute and chronic respiratory diseases, heart diseases, allergic and autoimmune disorders, pediatric hematology and oncology, common endocrine disorders of the childhood, kidney and urinary tract diseases, specific neurologic and muscular disorders of childhood age.

Social and preventive pediatrics covers study of morbidity in given population, influence of surroundings and community on child's health, methodology and techniques of general and specific prophylactic protection of child's health, organization of mothers and child's health care in a given population.

Infectious diseases

The objectives of the study course are to prepare the students of the faculty of medicine – future general profile doctors, in Infectious Diseases. The program is based on the requirements that are faced nowadays by physicians and is oriented on optimal fulfillment of the functions of each postgraduate doctor: detection of patients with acute and chronic

transmissible infectious diseases; primary diagnostics of the syndromes; study of the elements of primary medical care for patients with infectious diseases; study of the principles of etiology, pathogenesis and treatment during bacterial and viral infections; study of the diagnostic and treatment principles of the parasitic diseases and helminthoses prevailed in Georgia.

Phtisiology

Educational Course aim is to improve knowledge and practical skills of students in TB Prevention, Diagnosis and Treatment and ensure there appropriate involvement in early detection and quality management of Pulmonary (PTB) and Extrapulmonary Tuberculosis (EPTB).

Surgery (Integrative course, covers surgery surgery 1 and 2, urology, neurosurgery, child surgery, traumatology and orthopedy, oncology)

The aim of this educational course is to teach students etiology, pathogenesis and clinical manifestation of most common surgical diseases and their complications (course content see below), modern methods of clinical examination and treatment, also how to fill in the clinical records. Has to assist at different operations, work in the dressing room, watch together with surgical crew.
to the main principles and methods of workout, diagnostic tools and imaging and treatment principles of urological patients.
Students will learn general principles of common pediatric surgery pathologies (for ex: acute appendicitis**,** Treatment of purulent surgical infections in children – Acute and Chronic osteomyelitis , Acute appendicitis , Peritonitis, Esophageal Artesia, Congenital hypertrophic pyloric stenosis, Imperforate Anus, Hirshsprung disease, Bowel obstruction, Volvulus, NEC, Bleeding from GI tract, Inguinal and scrotal disorders**) ,** diagnostic and surgical treatment methods.
Students will learn basic principles of orthopedics and traumatology, studies will include anthropometry, evaluation and registration of ROM of joints, principles of diagnostics, treatment and documentation of musculoskeletal system diseases using modern classification systems, besides that students will also learn basic principles of primary care of traumatized patients, principles of immobilization, transportation, reposition – fixation of fractured fragments (application of plaster cast and splint), methods and duration of conservative and surgical treatment of fractures. Particular emphasis will be made on sport associated trauma, traumas associated with specific types of sporting activities.
Understanding the prevention, epidemiology, natural history and management of the common and curable cancers should consequently be a high educational priority. The care of patients with cancer necessitates the conscientious cooperation of physicians from many different disciplines (pathology, radiology, radiation oncology, surgery, and internal medicine). By introducing students to the principles of each oncologic discipline and their application to a wide variety of specific cancers, students learn to appreciate the relevance of pathology. Integration of a clinical oncology curriculum into the pathology course helps solve the cancer education.

Neurosurgical training course aims to provide basic knowledge about diseases, clinical manifestations, including neurological and neurosurgical pathology, accurate and timely diagnosis and treatment principles of Neurosurgical Disease.

Obstetrics and Gynecoogy 1

The aim of the obstetrics and gynecology course is to enable students to understand and discuss the clinical science basis and practice of obstetrics and gynecology. The teaching is performed through lectures, seminars and bedside practicals. At the end of the term student should be able to take a clinical history and perform physical examination of the patient with an obstetric and gynecological problem, as well as to discuss the relevant differential diagnosis. Students should be aware of the processes and mechanisms of adult in obstetrics and gynecology and should have developed skills in communication and be aware of that unique patient/doctor relationship involved in practicing clinical obstetrics and gynecology. Students should be able to carry out a complete examination of the pregnant woman and assess the gynecological patient including a pelvic examination. They should know to perform bimanual vaginal examination, take a cervical smear, advise a patient about contraception and sterilization, consult infertile couples, menopausal patients and users of hormonal replacement therapy and woman with oncologic and uro-gynecological problems. The students should gain experience in the routine care of pregnant patient and have to be involved in labour ward activities, assessment of emergence problems and acute gynecological admissions. Through gynecologic and obstetric term the students should be aware of the current ethical issues of obstetrics and gynecology and should gain knowledge on disease prevention and know the principles and the basis of screening in gynecology and perinatal medicine.

Oto-rhyno-laringology

The oto-rhyno-laryngology provides students with complete education in the comprehensive medicine and surgical care of patients with diseases and disorders of nose, throat, ear, head and neck. The educational program combines core basic science knowledge of oto-rhyno-laringology and the communication sciences with the clinical aspects of diagnosis and medical and/or basic surgical treatment for related aliments. Specific areas of focus include: the upper aero-digestive tract, the communication sciences (incuding audiology and speech pathology and rehabilitation), respiratory and swallowing disorders, the chemical sense disorders, neoplasma, deformities, congenital malformations and disorders of ears, face, neck and mandible, plastic and reconstructive surgery, sinonasal surgery, phonosurgery, surgery of the impaired hearing, implantation surgery, endoscopic surgery and also allergy, endocrinology and neurology as they relate to the head and neck, and finelly prevention of all mentioned diseases. The teaching is performed through lectures, seminars and bedside practicals.

Ophtalmology

The aim of the course is to teach/train the students (future MD) Clinical anatomy, functions and physiology of the eye. Gathering anamnesis. Methods of examination and diagnostics.

Measurement intraocular pressure by palpation. Determination of visual field by confrontation method. Clinic of pathologies and make differential diagnosis. Determination of the complexity of diseases. Correct assessment of information; conclusion formation, ophthalmologic care in multidisciplinary situation, definition of demand in filed specialist's consultation. Documented definitions of obtained data at emergency situations. First aid care and determination of tactics for further management. Using ophthalmologic symptomatic for diagnostics of general somatic diseases. Target utilization of opthalmo-pharmaco-therapeutic preparations. Instillation of local preparations, ointment application, conjunctive sac washing and eye bandaging (patches).

Anesthesiology and Reanimatology

The aim of the course is to acquire mandatory knowledge in urgent medicine, in clinical practice, acquire first aid methods in the hospital and outside of the hospital .To assess the severity of the disease, learn basic principles of respiratory management, respiratory therapy, sepsis and multiorgan insufficiency, invasive and noninvasive hemodynamics management

Clinical Toxicology

Under modern conditions timely finding of conditions dangerous for life of a patient and rendering emergency care is of great importance in work of any specialty physicians.
Acute poisoning is an important component of emergent treatment and emergency aid. Taking into consideration that the risk of acute poisonings permanently increases all over the world and in Georgia too, they are related to increase of chemical threat, uncontrolled usage of medicines, cases of acute gas intoxication under conditions of life, acute drug and alcohol intoxication and usage of toxic substances for suicidal purposes. Beginner physicians should know symptomatology, diagnostic criteria and urgent treatment of acute poisonings which is possible only by means of special cycle.

Psychiatry

The course intends to study the issues concerning prevalence, presentation, etiology and principles of management of mental disorders. The course provides solid foundation in the fundamentals of the evaluation, diagnosis and treatment of patients with mental health disorders. All major psychiatric diagnostic categories will be addressed including: affective disorders, anxiety disorders, psychotic disorders, alcohol and substance abuse disorders, geriatrics disorders, child and adolescent disorders, somatization disorders, oppositional defiant disorder, autism, pervasive developmental disorder, and personality disorders.

The Basics of Psychology

The basic objective of this course is to introduce to the students psychology as a science, its research methods, main psychological subjects and their applications in the real world. Students will:

- Become familiar with current scientific theory and research in the major topic areas of psychology.
- Gain understanding of the role of psychological factors in their lives and the lives of others, and an appreciation of the practical value of psychology.

- Develop skills necessary to evaluate and think critically about information concerning psychological phenomena.

- Be prepared for advanced study in psychology.

Clinical Psychology

The course intends to study the issues concerning prevalence, presentation, etiology and principles of management of mental disorders. The course provides solid foundation in the fundamentals of the evaluation, diagnosis and treatment of patients with mental health disorders. All major psychiatric diagnostic categories will be addressed including: affective disorders, anxiety disorders, psychotic disorders, alcohol and substance abuse disorders, geriatrics disorders, child and adolescent disorders, somatization disorders, oppositional defiant disorder, autism, pervasive developmental disorder, and personality disorders.

Hygiene and Medical Ecology

The purpose of this course is to prepare target oriented environmental health practitioners, researchers. Environmental health comprises those aspects of human health, including quality of life, that are determined by physical, chemical, biological, social and psychosocial factors in the environment. It also refers to the theory and practice of assessing, correcting and preventing those factors in the environment that can potentially affect adversely the health of present and future generations. The deep knowledge of environmental health issues gives the possibility to future doctors and health care professionals of thinking in a more wide scale and protects health of population.

Health Promotion

The purpose of this course is to prepare target oriented environmental health practitioners, researchers. Environmental health comprises those aspects of human health, including quality of life, that are determined by physical, chemical, biological, social and psychosocial factors in the environment. It also refers to the theory and practice of assessing, correcting and preventing those factors in the environment that can potentially affect adversely the health of present and future generations. The deep knowledge of environmental health issues gives the possibility to future doctors and health care professionals of thinking in a more wide scale and protects health of population.

Epidemiology with Biostatistics

Epidemiology is concerned with the study of factors that determine the distribution of health and disease in human populations. The purposes of epidemiological research are to discover the causes of disease, to advance and evaluate methods of disease prevention, and to aid in planning and evaluating the effectiveness of public health programs. Epidemiologists are interested in the study of infectious and noninfectious diseases. In recent years they have turned their attention increasingly toward the study of conditions affected by forces in the social and physical environment.

Biostatistics involves the theory and application of statistical science to the analysis of public health problems and biomedical research (for example, clinical trials and observational studies). Both disciplines involve collecting, classifying, summarizing, organizing, analyzing, and interpreting numerical information relevant to biological, medical, and public health problems.

Public Health

The course aims at providing students with basic knowledge and understanding of social aspects of health and disease and health protection of an individual, family and community. The students study dependent relations between health and disease in regard to social, ecological and genetic factors. In addition students learn to recognize and solve main health problems and principles of organization of health care. The topics covered by the course are: basic terms of health and disease, genetic aspects of population health status, relations between social and demographical ecology, health situation in Georgia and around the world, principles and measures of social care, the role and tasks of health services in health protection, health institutions and health workers, family physician as medical and social worker, health education and community participation, principles of evidence based medicine, ethical principles, metods in medical studies.

Forensic Medicine

The course intends to study the issues concerning prevalence, presentation, etiology and principles of management of mental disorders. The course provides solid foundation in the fundamentals of the evaluation, diagnosis and treatment of patients with mental health disorders. All major psychiatric diagnostic categories will be addressed including: affective disorders, anxiety disorders, psychotic disorders, alcohol and substance abuse disorders, geriatrics disorders, child and adolescent disorders, somatization disorders, oppositional defiant disorder, autism, pervasive developmental disorder, and personality disorders.

Clinical Skills (1,2,3,4)

The aim of the course is to provide students with basic clinical skills (manipulations) technique knowledge and ability to perform their skills using manikins and simulators and to discuss related clinical cases. Presentation of the Clinical Skills Department prospective, considering specificity of learning using manikins and simulators. Hands washing technique. Administration of medications. Eye-drops administration. Nose drops/spray administration; Hotty administration. Bedsore wounds care; Bed-clothes change technique. Syringe refill; Intradermal injection; Subcutaneous injection; Intramuscular Injection. Intravenous injection; Intravenous catheterization; Infusion set administration. Nasal-gastric tube insertion; Gastric

lavage; Oro-gastric tube insertion; Gastric lavage; Urine sampling. Child development periods. Healthy child, disease signs. Most frequent pathologies in children; Family drug box. Medication forms and their usage; Side effects Vaccination, pros and cons, schedule. Bite disinfection. Sunbathing, water procedures. First aid for indigestion, technique of colon clearance; What we need when vomiting. Hyperthermia, hypothermia, first aid. First aid for collapse; First aid for nasal hemorrhage. What to do during abdominal pain. Schedule of permanent teeth growth. Monitoring of vital signs, monitoring BP, severe failure of cardiovascular system – collapse, sudden death, classification of shock. Common principles of the first aid : Importance of first aid; Algorithm of the first aid; Alphabet of the first aid DRCAB (doctor CAB); Cardio-pulmonar resuscitation. Full examination of the newborn, identification of dangerous signs, steps of examination: pulmonary system, cardiovascular system, newborn posture, skin, skull, face, eyes, oral cavity, neck. Examination of newborn: abdomen, genitalia and anus, chest, spine, extremities, neurological status asessment, antropometry. Modern model of antenatal care. Signs and symptoms of pregnancy. Determination of due date using Negel Rule. Using of OB wheel to determine expected date of pregnancy, gestational age and expected infant weight and length. Examination of pregnant woman (inspection, measurement of fundal height, abdominal examination with Leopold maneuvers for determination of fetal lie. position and presentation, listening of heart tones with using stethoscope, assessment of body mass index and recommendations for weight gain

Communication Skills (1and 2)

The purpose of Communication Skills 1 is to contribute to form the attitude of the first year medical students to their future profession, to "introduce" them to patients, to familiarize them with the objectives and general structure of health care system, to develop some of basic communication skills, which are essential to their future profession.

The purpose of the Communication Skills is to familiarize II year medical students with the subject of their future professional activity – THE PATIENT, their problems and expectations, to encourage the students to think about the essence of health and illness, to acquaint them with doctor's working environment on the example of family doctor and primary care team; also, to help the students to comprehend the importance, main elements and features of doctor-patient communication and the bio-psycho-social approach; to acquaint students with the purpose and objectives of medical consultation; to motivate students to keep confidentiality and respect patient's privacy; to help students to develop general communication skills which are essential for their future profession.

Georgian Language (1, 2 and 3)

Objectives of the Georegian language 1 are:

Teaching conversational Georgian language on A1 Elementary level to international students so that they could easily adapt and socialize in new environment.

- Providing students with general information about uniqueness and originality of Georgian language
- To motivate them get better acquainted with the new culture.

The aim of the Georegian language 2 is teaching communication Georgian language on B1 Pre-intermediate level to international students so that they could adequately use it according to their everyday needs and professional activities. (e.g. For minimal communication with patients during medical practice).

The aim of the Georegian language 3 is teaching communication Georgian language on B1 Pre-intermediate level to international students so that they could adequately use it according to their everyday needs and professional activities. (e.g. For minimal communication with patients during medical practice).

Professional Latin Langiage

The course is designed for Professional Latin Language teaching to the students of Medical faculty. the course implies the use of Latin Language in professional medical activities. Course is focused on the study of International Medical Terminology.

History of Medicine

The aim of the course is to evaluate medical science and technology through the contrasting perspective of the humanities, developing criticism in students. The basic principles of Medical history is: understanding how modern medicine was developed; applying historical models exemplifying how diseases emerge and disappear in different time periods in relation to geography, demography, wars, scientific experiments or bioterrorism; applying historical models in discussions on various types of traditional medicine and unconventional methods of healing in various periods versus classical medicine; applying historical models in training students to discuss problems of development of medical theories and practice, of public health services as well as the development of bioethical issues.
The teaching is performed through lectures, which provide necessary date in theoretical foundations and seminars, which enable interactive learning through discussions.

Bioethics

The core program in medical ethics is designed for the purpose of introduction for medical students into the various practical clinical problems and the decision making involving principles of medical ethics. Students are confronted with ethics of the life support and its termination, extracorporal fertilization and artificial abortion, transplantation of tissues and organs from living and dead donors, approach to HIV positive patients in the medical facilities, protection of privacy and information in modern medical settings etc. Students are invited to participate in the evaluation of the presented cases well as decision-making concerning the treatment. Active participation of the student is encouraged through discussion and presentation of cases from medical practice.
The course is delivered by means of seminars.

Scientific Research

The major goals of this course for students in Medical School are to help them to gain familiarity in reading primary research literature, including utilization of statistical analyses, critical evaluatin of a scientific article and principles of scientific writing, to aid the students in selection of a thesis mentor and in understanding of appropriate expectations for both mentor and mentee and to prepare them for the biomedical research phase of training. The course objective is to develop skills for physician-scientist trainees in critical evaluation of the research literature and formulating high-impact research questions. These goals will be accomplished in a casual setting through interactions faculty and lab members, consultation with faculty advisors, and primary literature discussions. The teaching is performed through lectures, seminars, problem-based small groups. Students will be assessed based upon course participation.

Clinical Clerkships

Therapy Integrative course - covers: The management of internal diseases and basics of geriatrics, family medicine)

The course is 9 weeks in duration and takes place (rotation principle) at the departments of Internal Medicine of the teaching/affiliated hospital and out-patients setting. Teaching is system-based and comprises diseases of Cardiovascular, Respiratory, Gastrointestinal (Digestive), Urinary and Musculoskeletal system as well as specificity of these diseases in elderly patients.

Students have to perform medical history and physical examination of patients with internal medicine problems, with emphasis on differential diagnosis, and to construct an investigation, management and treatment plan. They also provide direct patient care for their assigned patients under supervision. Students should observe patients give night calls within the scope of abilities , attend daily, weekly rounds and grand rounds, participate in case discussions.

The format of the course:

1. Daily interactive practicals based on case discussion
2. Seminars – once a week
3. Bedside examination (including interviewing and examination of elderly patients)
4. Night calls
5. Attending daily rounds
6. Mastering prescription and completing relevant documents
7. Preparing presentations in learning groups

The purpose of the course of family medicine is to acquaint VI year students with the essence of family medicine, distinctive features of family medicine as a specialty and its role in primary care and overall health care system; to demonstrate comprehensive, bio-psycho-social approach within this specialty and show specific qualities of family physicians in problem solving related to prevention and management of acute and chronic health problems.

On the other hand, the course is aiming at creating positive image of family medicine as a specialty, providing general information, which could be helpful for students for professional orientation and provoking interest towards this specialty.

Surgery

The aim of the study course "Surgical Diseases": widening and broadening of the basic knowledge in surgery gained in the previous courses, development of the clinical thinking that means: to specify, broaden and concretize student's knowledge in surgery, to familiarize them with different forms of the surgical diseases; to teach their diagnostics and management as by the patients bed in hospital as well as in the outpatient setting.
Student – the future general practitioner should be able to correctly determine the treatment tactics proceeding from the concrete peculiarities of the patient, to draw a plan of necessary examinations, to make up indication for operation, details of preoperative preparation and management of the postoperative period, and after that to analyze, summarize the received clinical results; to develop practical skills.
The main task will be considered to be ability of the future general practitioner of symptomatic and syndromic diagnostics, differential diagnostics, making decisions in critical situations and rendering aid. Development of ability of the priority clinical thinking.

Pediatrics (integrative course –covers: Child and adolescent medicine, child infectious diseases, child neurology)

Preparation of the General Physician, who knows the basics of pediatrics, which will allow him/her to go throw residency program in desired area of medicine, who will be able to support the normal growth and development of healthy child, to manage common diseases, to deliver emergency medical care, to reveal diseases needing to be referred to the secondary and tertiary stages of medical care.
In order to reach these goals the students must:

- Receive basic knowledge on growth and development (physical, physiological and psychosocial) and their clinical importance from birth including adolescence period;
- Develop communication skills with children, adolescents and their care-givers;
- Develop competencies in physical examination of neonates, children and adolescents;
- Receive knowledge necessary for initial diagnostic and basic management of common acute and chronic diseases;
- Develop skills of medical problem-solving;
- Be aware of the influences of family and society on the health of child and adolescent;
- Be familiar with principles of strategies of health promotion and diseases/injuries prevention;
- Develop professional behavior adequate to clinical praxis.

The aim of the Child Neurology course is to teach the child neurology with the volume which can be enough for general physicians and to make diagnosis and differential diagnosis of main diseases and syndromes of infants, children and adults.

The goal of the studies at Division of Pediatric Infectious Diseases is to get acquainted with the clinical appearance of preventable diseases and learn how to control them, to learn how tomanage Respiratory and Diarrheal infections in childhood, to understand the development of antibiotic-resistance and learnrational use of antibiotics.

Obstetrics and Gynecology

Obstetrics and Gynecology (accoucher- means of assistance during childbirth) Obstetrics is one branch of clinical medicine that deals with physiological and pathological processes in the woman's body during pregnancy, childbirth and the postnatal period. The most important tasks of midwifes is to diagnose treat and prevent the pathological processes which may occure during pregnancy, childbirth and puerperal periods. Midwifes main goal also is to prevent diagnose and treat fetal and neonatal pathology. Gynecology is derived from the Latin word GYNAKOS the term is of Greek origin and means teaching about women. Thus Gynecology is a branch of clinical medicine that deals with the anatomical and physiological characteristics of woman's body during different ages. This discipline also studies female genital tract disease,s the methods of prevention, diagnosis and treatment. The independent part of discipline is a children and adolescent gynecology, that studies physiological and pathological processes of girls under 18 years of age . Thus Obstetrics and Gynecology is a branch of clinical medicine which is necessary as a basic knowledge for any of the doctor specialty. In addition the aim of our course is to induce the big interest to Obstetrics and Gynecology in Medical studens during study process and the purpose of choosing a future profession

Clinical Radiology

The objectives of the course are knowledge of Methods and diagnostic possibilities of X-Ray, Nuclear Medicine, Ultrasonography, Thermography, MRI modalities. The course covers:

- Overview of Diagnostic Radiology Modalities
- Brain Imaging
- Radiology of Chest
- Radiology of cardiovascular system
- Radiology of GI tract, hepato-biliary system, pancreas and spleen.
- Radiology of urinary system, prostate and testicles.
- Women's imaging (OB/GYN, breast)
- Radiology of musculo-skeletal system. Thyroid, Salivary glands, Soft tissues&lymph nodes)
- Interventional Radiology(IR)

Rehabilitation and Sport Medicine

The goal of the multidisciplinary academic specialty *Medical Rehabilitation and Sports Medicine* is introduction to the main principles and methods of physical medicine and

rehabilitation that form a basis for recovery of functional status of the body and complete or partial restoration of working capacity following various diseases and injuries. Students are acquainted with principal measures of healthy lifestyle implementation related with physical activity; they learn functional testing methods connected with graded physical exertion of healthy and diseased individuals, as well as of athletes. The crucial objective of *Medical Rehabilitation and Sports Medicine* is provision of students with theoretical and practical knowledge needed for prescription of movement regimen, which plays an important role for increasing working capacity and life expectancy of humans. Learning modern methods and peculiarities of investigation and treatment of athletes will enable the students to use sport properly both for recreational and treatment purposes.

Health Resort and Physiotherapy with Medical Tourism

The goal of the discipline is to teach future physicians the basic methods of electrotherapy, Balneology, climatotherapy, which are employed for complex (medicamentous and non-medicamentous) management of various disease conditions and traumas, and result in partial or complete restoration of physical ability of the patient.At the given time, students will to acquire the general knowledge about: physiological action of natural and preformed physical factors. suitable use of natural and preformed physical factors. t indications and contraindications of appointment of natural and preformed physical factors for treatment and rehabilitation. Georgian health resorts. general principles of working of physiotherapeutic apparates-practical studies in the balneo- and physiotherapy departments'.About preparation of qualified cadres, for developed touristic- resort infrastructure of Georgia in perspective.

Narcology

The purpose of a training course is to acquaint students with:

- biological, medical, psychological and social bases of dependence (drug addiction);
- features of addict persons, principles of their definition, features of mutual relations with addicts;
- general principles of diagnostics, current and treatment of drug addiction;
- principles of preventive maintenance of drug addiction and medical rehabilitation of dependent persons.

B/ ELECTIVES

Laboratory Medicine

The Laboratory Medicine academic course aims to provide students with information on the purposes and capabilities of laboratory services, on research that is currently widely used in every type of medical establishments, amongst them, Physical Medicine and Rehabilitation institutions. Additionally, it aims to present students with laboratorial research algorithms that will enable graduates of the faculty of Physical Medicine and Rehabilitation to select

those types of laboratorial research, which will be optimal in every concrete occasion and will create preconditions for achieving maximal medical treatment effects.

Reproductive health

The aim of teaching of reproductive health study course is acquisition of the knowledge of technologies, methods and services for providing the reproductive health. Students will get the information about the issues included in the action plan for development of reproductive health in Georgia. The borderline topics, essential for beater understanding of reproductive health problems, will be taught as well. the students will develop sense of responsibility, skills of patient's supervision, giving instructions, consulting and critical assessment.

Vascular Surgery

The principal objectives of **the study course** is to give to students of Medical Faculty, modern knowledges about angisurgery diseases etiology, pathogenesis, clinical signs, diagnosis and treatment methods. Students will gain as theoretical so practical knowlegdes in inspection methods of angiologica pathologys diseased patients (clinlical findings, palpation, blood vessels auscultation), methods of diagnosis: CT scan, MRI, Angiography, Doplerography, Tcpo2-metry)

Rheumatology

This is an outpatient service rotation designed to immerse the student extern in the evaluation and care of patients with a wide variety of rheumatic diseases. Special emphasis is placed on the patients with rheumatoid arthritis and lupus; however, all of the inflammatory and degenerative connective tissue disorders will be seen and reviewed. There is daily contact with several rheumatologists as well as the entire staff of the Arthritis Center at Vanderbilt Hospital (physical therapy, occupational therapy, patient educator, etc.) The student will observe patient evaluations and treatment methods and will be expected to perform some new patient assessments. At the conclusion of the elective, students will know the most practical and cost effective means of efficiently planning evaluations and treatments. This rotation is especially valuable to students considering primary care and orthopaedics.

The radiation biology and the radiogenic risks

The aim of the course is to introduce students to the latest data about the biological effects of the ionizing radiation and the role of the individual organism in the formation of the terminal radiobiological effect. The course with give students the knowledge how to evaluate the risks of the radiological procedures , about modern methods of evaluation radiogenic risks and prevention of the later.

The Departments that participate in the learning process

FACULTY OF MEDICINE

1. The Department of Human Anatomy
2. The Department of Topographical Anatomy and Operative Surgery
3. The Department of Preclinical and Experimental Anatomy
4. The Department of Histology, Cytology and Embryology
5. The Department of Pharmacology
6. The Department of History of Medicine and Bioethics
7. The Department of Psychology
8. The Department of Pathophysiology
9. The Direction of Pathology
10. The Department of Microbiology
11. The Department of Immunology
12. The Department of Molecular and Medical Genetics
13. The Department of Forensic Medicine
14. The Department of Internal Medicine # 1
15. The Department of Internal Medicine # 2
16. The Department of Internal Medicine # 3
17. The Department of Endocrinology
18. The Department of Allergy and Clinical Immunology
19. The Department of Family Medicine
20. The Department of Infectious diseases
21. The Department of Phtysiology
22. The Department of Dermatology and Venerology
23. The Department of Surgery # 1
24. The Department of Surgery # 2
25. The Department of Surgery # 3
26. The Department of Surgery # 4
27. The Department of Urology
28. The Department of Eye Diseases
29. The Department of Oto-rhyno-laryngology
30. The Department of Clinical skills and multidiscipline simulation
31. The Department of Propedeutics of the Internal Diseases
32. The Department of General Surgery
33. The Department of Anesthesiology and Reanimatology
34. The Department of Toxicology
35. The Department of Obstetrics and Gynecology
36. The Department of Propedeutcs of Neural Diseases and Topical Diagnostics
37. The Department of Clinical Neurology
38. The Department of Psychiatry
39. The Department of Narcology
40. The Department of Pediatrics # 1
41. The Department of Pediatrics # 2
42. The Department of Pediatrics # 3
43. The Department of Pediatrics # 4
44. The Department of Child Infectious diseases
45. The Department of Child Surgery
46. The Department of Child Neurology
47. The Direction of Radiology

FACULTY OF STOMATOLOGY

48. The Department of Head and Neck Oncology

FACULTY OF PHARMACY

49. The Department of Medical Chemistry
50. The Department of Biochemistry

FACULTY OF PUBLIC HEALTH

51. The Department of Management, Politics and economy of the Public Health
52. The Department of Epidemiology and Biostsatistics
53. The Department of Hygiene and Medical Ecology
54. The Department of Enviromental health and Professional Medicine

FACULTY OF PHYSICAL MEDICINE AND REHABILITATION

55. The Department of Physics, Biophysics, Biomechanics and Informational Technologies
56. The Department of Physiology
57. The Department of Medical Biology and Parasitology
58. The Department of Traumatology and Orthopedics
59. The Department of Medical Rehabilitation and Sport Medicine
60. The Department of Resortology and Physiotherapy

CENTERS

61. Center of Foreign Lnguages
62. Center of Georegian Language
63. Center of Scientific skills