

This form is used in preparation of the NVU program. Entries on this form should be transferred to the University Board for approval. Fields marked blue indicate NVU requested information and should not be filled out (unless otherwise provided), whereas yellow fields are optional.

1. General Information

Title:		Medical Doctor Program					
Qualification (according to major):		Medical Doctor (Certified physician)					
Number of Credits:		360	QF Level (VI, VII or VIII)		VII		
Available Concentrations:		NA					
Responsible School(s):		Medicine					
Program Leader(s):		Shorena Chumburidze; Nana Japaridze.					
Language of Instruction:		English					
Enrolment Requirement provided by the Law on HE		Secondary School Certificate and Unified National Exam/MoES special Regulation		Other		In case of MoES special Regulation: Proof of Proficiency in English at B2 Level; MCAT (Chemical and Physical Foundations of Biological Systems) or Biology & Chemistry knowledge certification.	
Minor qualification:	N	Available for online enrolment	N	Available for exchange students:	Y	Work experience/ placement:	N
Available for Non-degree students:	N	Prior Registration Requirement	Y	Other	N	Other	N
Estimated student numbers:		200 per year		Program replaces: (if any)		MD Program from Fall, 2013 (05.09.2013)	
Date of possible implementation:		Implemented since Fall 2014; with current amendments from Fall, 2017		Date of proposal:		17.08.2017	

2. Aims and Learning Outcomes

Objectives:	<ul style="list-style-type: none"> ✓ To develop caring, competent, confident medical doctors through outcome-based teaching approach ensuring high quality of health care and biomedical research in academic, in- and out-patients settings. ✓ To provide medical training, predominantly in a practical environment (where acquisition and organization of knowledge match with practical application of gained competencies), based on ethical values, respect for individual autonomy and on the premise of rational and efficient interference.
-------------	--

	<ul style="list-style-type: none"> ✓ To meet global standards of medical education set by World Federation of Medical Education, and defined by TUNING/MEDINE learning outcomes for undergraduate medical education.
Generic Learning Outcomes:	<p>Ability of Analysis and Synthesis</p> <ul style="list-style-type: none"> ✓ To be able to critically evaluate complicated, uncertain, incomplete and contradictory data; ✓ Capability to analyze data independently, present the results of the analysis in an understandable manner and further use them; ✓ To have critical approach to new information; ✓ be able to analyze, summarize, ✓ To be able to integrate different data and make conclusions; ✓ To present the evidences and counterarguments upon the analysis of the results. <p>Information Management</p> <ul style="list-style-type: none"> ✓ To be able to collect data from different information sources; ✓ To process the large amount of information and make critical analysis; ✓ To be able to use collected information. <p>Problem Solution/Decision Making</p> <ul style="list-style-type: none"> ✓ To be able independently define and raise complex problems and to find the ways for their solution; ✓ To provide analysis of expected results and make a final decision; ✓ To know and in case of need to be able efficiently use additional resources within the field of study. <p>Team-Working Ability</p> <ul style="list-style-type: none"> ✓ To be able to work in team both as a team-member and a leader; ✓ To be able to clearly formulate tasks, discuss them with team-members, coordinate their activities and adequately assess potential of the team, management of conflict and force-majeure situations. <p>Ability to Communicate Verbally, Amongst them in Foreign Language</p> <ul style="list-style-type: none"> ✓ To be able to observe, listen, ask question, communicate non-verbally; To be able to participate in meetings and express own opinions verbally and in writing; ✓ To be able to conduct negotiations in professional context and participate in resolving conflict situation. <p>Ability to Stay Up to Date with Learning</p> <ul style="list-style-type: none"> ✓ To be able to use the full spectrum of education-information resources; To be able to manage own learning process; understands the necessity of staying up to date with learning; ✓ To be able to evaluate own knowledge and skills. <p>Ability to Work Independently</p> <ul style="list-style-type: none"> ✓ To be able to manage time properly; define priorities, meet the deadlines and work on agreed issues; ✓ To be able to plan effectively resources related to intended activities and to be responsible for the work done.

Subject Specific Learning Outcomes:
Knowledge and Understanding

- ✓ Knowledge of relevant principles, concept and ideas of fundamental and applied biomedical sciences;
- ✓ Knowledge of behavioral and social sciences and understanding of a physician's role in local and global community, including public health system;
- ✓ Knowledge of main groups of medicines and principles of their prescription relevant to pathological conditions and diseases;
- ✓ Knowledge of ethical and legal principles;
- ✓ Recognition complexity of clinical presentations and methods of problem solving.

Capacity for Applying Knowledge in Practice

- ✓ Carry out a consultation with a patient;
- ✓ Provide immediate care of medical emergencies, Including First Aid and resuscitation;
- ✓ Apply scientific principles, method and knowledge to medical practice and research;
- ✓ Based on acquired knowledge assess clinical presentations, order investigations, make differential diagnoses, and negotiate a management plan;
- ✓ Prescribe medicines and other treatment with clinical context;
- ✓ Discuss the adequacy of the medicines and other treatment with the patient and evaluate the potential benefits and risks;
- ✓ Carrying out relevant practical procedures;
- ✓ Ability to work in a multidisciplinary team as an ordinary member or leader;
- ✓ Ability to formulate tasks, coordinate with team members, adequately assessing capacity of team members, capacity to deal with uncertainty and force majeure situations;

Decision-making

- ✓ Ability of clinical reasoning, to analyse critically incomplete and controversial data;
- ✓ Performing differential diagnosis;
- ✓ Apply the principles, skills and knowledge of evidence-based medicine.

Communication

- ✓ Ability to communicate effectively in a medical context verbally and in written form in native and foreign languages;
- ✓ Ability to listen, observe, asking proper questions;
- ✓ Use information and information technology effectively in a medical context;
- ✓ Non-verbal communications skills.

Capacity to Learn

- ✓ Management of self-learning - acquisition and organization of medical knowledge matching with its practical application;
- ✓ Ability to retrieve medical information from different sources and its critical appraisal;
- ✓ Recognizing necessity of continuous renewal of knowledge and continuous professional development;
- ✓ Ability to recognize limits of own knowledge and clinical skills.

Values

- ✓ Apply ethical and legal principles in medical practice;
- ✓ Respect patients' rights;
- ✓ Efficient communication with any person irrespective with social, cultural, religious and ethnic belonging;
- ✓ Assess psychological and social aspects of a patient's illness;
- ✓ Promote health, engage with population health issues and work effectively in a health care system;
- ✓ Communicating with colleagues considering principles of justice, social and democratic values.

3. Modularized Components Referring to Student Workload and Learning Outcomes

Reference Code (Program-Module- Component indication)	Modules & Components:	Status (core/elective)	ECTS	Semester suggestion for student profile	Lecture	WG/Tutorial/Couching Clinical Training	Total Contact hours	Exams and Assessment	Independent work	Total hours
Curriculum Spiral's First Loop (120 ECTS – All Core)										
MD1101	Introduction to Medicine I	C	4	I	24	12	36	3	81	120
MD1102	Introduction to Medicine II	C	4	II	30	30	60	4	56	120
MD1201	Body Systems I - Musculoskeletal Systems	C	10	I	72	78	150	4	146	300
MD1202	Body Systems II - Neurosciences	C	14	II	90	150	240	4	176	420
MD1203	Body Systems III - Cardiovascular and Respiratory Systems	C	8	III	60	72	132	4	104	240
MD1204	Body Systems IV - Gastrointestinal, Urinary, Endocrine and Reproductive Systems	C	8	IV	60	72	132	4	104	240
MD1301	Life Sciences I	C	12	I	90	90	180	8	172	360
MD1302	Life Sciences II	C	8	II	75	45	120	6	114	240
MD1303	Life Sciences III	C	14	III	120	94	214	6	200	420
MD1304	Life Sciences IV	C	14	IV	120	94	214	6	200	420
MD1401	Research Methodology I	C	4	I	15	15	30	3	87	120
MD1402	Research Methodology II	C	4	II	30	30	60	4	56	120
MD1501	Public Health I	C	4	III	30	0	30	5	85	120
MD1601	Pathology	C	8	IV	60	60	120	5	115	240

MD1001	Clinical Skills I - Basics	C	4	III	0	90	90	5	25	120
Curriculum Spiral's Second Loop (60 ECTS – Core 50 & Free Elective 10)										
MD2011	Bridging PBL	C	4	V	0	60	60	0	60	120
MD2021	Systemic Pathology	C	8	V	60	60	120	7	113	240
MD2031	Pharmacology	C	6	V	45	45	90	4	86	180
MD2041	Physical Diagnosis	C	8	V	30	120	150	6	84	240
MD2051	Public Health II	C	4	V	30	0	30	5	85	120
MD2061	Family Medicine I	C	4	VI	15	30	45	5	70	120
MD2071	General Surgery	C	6	VI	30	90	120	4	56	180
MD2081	Medical Law & Ethics	C	6	VI	26	26	52	6	122	180
MD1002	Clinical Skills II - Advanced	C	4	VI	0	90	90	5	25	120
Curriculum Spiral's Third Loop (120 ECTS – Core 110 & Free Elective 10)										
MD3011	Internal Medicine I	C	8	VII	45	135	180	6	54	240
MD3012	Internal Medicine II	C	6	VIII	30	90	120	6	54	180
MD3013	Internal Medicine III	C	12	IX	60	210	270	6	84	360
MD3014	Internal Medicine IV	C	12	X	60	210	270	6	84	360
MD3021	Surgery I	C	6	VII	30	90	120	4	56	180
MD3022	Surgery II	C	6	VIII	30	90	120	4	56	180
MD3023	Surgery III	C	6	IX	30	90	120	4	56	180
MD3031	Clinical Pharmacology	C	6	VII	30	60	90	6	84	180
MD3061	Obstetrics & Gynaecology	C	12	VIII	60	150	210	8	142	360

MD3051	Paediatrics	C	10	VII	75	100	175	10	115	300
MD3061	Neurology	C	6	VIII	30	60	90	6	84	180
MD3081	Family Medicine II	C	6	IX	30	30	60	6	114	180
MD3091	Psychiatry	C	6	IX	45	45	90	4	86	180
MD1003	Clinical Skills III	C	8	X	0	180	180	10	50	240
Curriculum Spiral's Fourth Loop (60 ECTS – Core 44 & Medical Program Electives 16)										
MD4011	Internal Medicine V	C	8	XI	30	120	150	10	80	240
MD4021	Surgery IV	C	6	XI	30	90	120	4	56	180
MD4031	Medical Ethics and Leadership	C	6	XI	30	30	60	5	115	180
MD4041	Geriatrics	C	6	XI	45	90	135	5	40	180
MD4061	Emergency Medicine	C	6	XII	30	90	120	5	55	180
MD4071	Oncology, Palliative Care	C	6	XII	30	60	90	5	85	180
MD4081	Physical Therapy and Rehabilitation	C	6	XII	30	90	120	4	56	180
ELECTIVE COMPONENTS										
MD5001	Fundamentals of Neurology	E	6	V	30	30	60	5	115	180
MD5002	Communication Skills in Medicine	E	6	V	30	60	90	5	85	180
MD5003	Applied Molecular Genetics in Medicine	E	6	V	24	24	48	4	128	180
MD5004	Advanced Medical Biophysics	E	4	V	12	24	36	6	78	120
MD5005	End of Life Care	E	4	V	30	0	30	4	86	120
MD5006	Cell Membranes	E	4	V	30	0	30	4	86	120
MD5007	Advanced Parasitology	E	4	V	30	0	30	4	86	120

MD5008	Mycology	E	4	V	30	0	30	6	84	120
MD5009	Foodborne and Waterborne Pathogens	E	4	V	10	20	30	6	84	120
MD5010	Everyday Life and Extreme Conditions Pathophysiology	E	4	V	30	0	30	4	86	120
MD5011	Physiology of Vision	E	4	V	11	28	39	4	77	120
MD5012	Radiology Advances	E	4	V	20	20	40	3	77	120
MD5013	Laboratory Medicine	E	4	V	30	30	60	5	55	120
MD5014	Stem Cells	E	4	V	26	26	52	4	64	120
MD5015	Nutriology	E	4	V	15	30	45	5	70	120
MD5016	Science Review of Maxillofacial Region	E	4	V	24	0	24	4	92	120
MD5017	Fundamentals of Toxicology	E	6	V	24	24	48	4	128	180
MD5018	Seminar on Behavioural Science	E	4	V	26	0	26	6	88	120
MD5019	Neuroscience: Retrospective Guide	E	6	V	24	0	24	4	152	180
MD5020	Personalized Medicine	E	4	V	26	0	26	4	90	120
MD5021	Clinical Radiobiology and Radiation Protection	E	4	V	24	0	24	4	92	120
MD5022	Electrocardiography	E	4	V	0	20	20	5	95	120
MD5023	Primary Care	E	6	V	30	30	60	6	114	180
MD5024	Inpatient Care	E	4	V	0	20	20	5	95	120
MD5025	Seminar on Patient Safety	E	1	V	6	6	12	2	16	30
MD5026	Seminar on Social Responsibility and Neurorehabilitation	E	1	V	4	6	10	2	18	30
MD5027	Health Economics	E	6	V	26	0	26	4	150	180
MD5028	Managing Information in Healthcare	E	4	IX	30	0	30	4	86	120
MD5029	Strategic Marketing for Healthcare Organizations	E	4	IX	15	30	45	5	70	120

MD5030	Managing and Improving Quality	E	4	IX	30	0	30	4	86	120
MD5031	Development Medicine	E	4	IX	40	30	70	7	43	120
MD5032	Sexual Dysfunction	E	4	IX	24	12	36	4	80	120
MD5033	Recent Advances in Basic and Clinical Nanomedicine	E	4	IX	18	27	45	5	70	120
MD5034	Advanced Techniques in Dermatologic Surgery	E	4	X	30	30	60	5	55	120
MD5035	Surgical Oncology	E	4	XII	30	30	60	5	55	120
MD5036	Medicine and the Power of Ideas	E	6	V	30	30	60	5	115	180
MD5037	Socioeconomic impact on artificial intelligence	E	2	V	4	12	16	20	24	60
MD5038	Medical informatics – Sustainable Health Ecosystems	E	1	V	2	6	8	10	12	30
MD5039	Intelligent Images: Introducing Modern Microscopy	E	2	V	4	12	16	20	24	60
MD5040	Emotional Leadership and Art of Communication	E	1	V	2	6	8	10	12	30
MD5041	Mental Health and Clinical Psychology	E	4	IX	30	0	30	4	86	120
MD5042	Holistic Health-Sport-Wellness-Retail Science and Sustainability	E	6	IX	30	30	60	6	114	180

Please indicate which skills will be developed most within the program. Please choose a minimum of 5 (Maximum of 10) from the list below.

Analytical Skills	√	Leadership	
Commercial Awareness		Planning and Organisation	√
Confidence		Professionalism	
Creative Problem Solving	√	Research Skills	√
Critical Thinking	√	Self-Awarenes	√
Ethical Awareness	√	Social and Cultural Sensitivity	
Flexibility		Team Working	√

Independent Working	√	Time Management	
Initiative		Interpersonal skills	
Capacity to learn	√	Teaching ability	

4. Methods of Achieving Learning Outcomes and Assessment:

Rationale between employed methods and achievement of learning outcomes:

Employed teaching and assessment methodologies enable the **acquisition and organization of knowledge match with practical application of gained competencies**. Principles of outcome-based education imply that teaching, learning and assessment are conducted on the basis of pre-defined competencies of graduates in accordance to the “top-bottom” principle.

The MD curriculum is comprised of **four loops referring to knowledge, skills and values**, where every consecutive loop builds on previous one and sets more complex learning objectives.

- ✓ The Curriculum Spiral's First Loop (120 ECTS) is comprised of the widely integrated core modules of Body Systems (Anatomy, Physiology, Imaging) and Life Sciences (Biochemistry, Molecular Biology, Histology), which are vertically linked to summative pathology course and accompanied by teaching core values of medicine, clinical skills and research methods.
- ✓ The Curriculum Spiral's Second Loop (60 ECTS) containing bridging courses (Bridging PBL, Pharmacology and Systemic Pathology) and synergy courses (Physical Diagnosis, Family Medicine I, General Surgery, etc) links the study of pathological changes and disease symptoms with the practical comprehension of modern principles and methods facilitating the diagnostic process.
- ✓ The Curriculum Spiral's Third Loop (120 ECTS) is bound to the study of the treatment of diseases and syndromes in accordance with the latest clinical guidelines and protocols constructed by the evidence-based medicine. It builds on the previous loop revisiting and deepening knowledge, mastering skills and developing values simultaneously setting higher-level complex objectives.
- ✓ The Curriculum Spiral's Fourth Loop (60 ECTS) builds on and rounds up previously acquired competences reinforcing trans-disciplinary understanding of real-world challenges. Thus, final and highest level of learning objectives are met through hands on practice applying gained knowledge, skills and values independent of discipline specific understanding.

Program Learning Outcomes are best achieved through:

- ✓ interactive lectures, working group sessions and tutorials,
- ✓ problem-based learning,
- ✓ role-plays,
- ✓ bedside learning and night shift,
- ✓ individual-, peer- and group coaching,
- ✓ e-, simulation- and 3D-based learning,
- ✓ Laboratory teaching,
- ✓ early-stage involvement into the biomedical research, and

application of diverse assessment methodologies combining e.g. MCQ, Case Assessment, Open Book, Concept Map, Portfolio, Practical Spot and Objectively Structured Clinical Examination (OSCE).

Grading System:

Number of points	Mark/grade (short description)	Average performance percentage ratio of successful students (may be used for
------------------	--------------------------------	--

		monitoring assessment adequacy)
91-100	A (excellent)	the best 10 %
81-90	B (very good)	exceeding average 25 %
71-80	C (good)	average 30 %
61-70	D (satisfactory)	close to average 25%
51-60	E (sufficient)	the worst passing 10%
41-50	FX (resit in the same semester)	
0-40	F (Fail)	

5. Resources

Resource needs essential for program delivery:

Name:	Description:
E-resources	Computer based training resources, Educational videos and study aids, E-Library.
Clinical setting	Predominantly New Vision University Hospital & New Vision University Clinical, Research & Teaching Centres; Multifunctional hospital chain.