Qualification handbook

Qualification models				
Study program	**Qualification title according to the Law on Qualifications of the Republic of Srpska**	**Qualification title in English**	**Level of qualification according to *EQF* standard**	**Page**
First and second- cycle academic studies				
	Doktor medicine	*Doctor of Medicine*	**Level: 7**	
Third-cycle academic studies				
	Doktor medicinskih nauka	*Doctor of Philosophy (PhD)*	**Level: 8**	

QUALIFICATION STANDARD FOR THE STUDY PROGRAM IN MEDICINE

2. 1. Basic characterictics

a) Study cycle: **Integrated study**
b) Degree: **Academic**
c) Study module: **Study program Medicine is conducted according to 6+3 model**
d) Name of qualification (generic + subject specific): **Doctor of Medicine**
e) Language of instruction: **English**
f) Official length of the program: **Six years**
g) Minimal volume - ECTS points: **360**
h) Level: **7**
i) Entry routes
- **completed a four-year high school with a minimum average grade of 3.0**
-passing the entrance exam

2.1.1. Introduction to the study program

The European Qualifications Framework (*EQF*) in Medical Scienties

1.1.2. The study program necessity – justifications
- labour market needs
- society needs

2.2. Competencies / learning outcomes

2.2.1. Competencies at the level of study program

KNOWLEDGE

Doctor of Medicine must possess the knowledge and understanding of:

- the structure and function of the human body,
- the human psyche,
- disease prevention, diagnosis and treatment, as well as the process of rehabilitation after it,
- the social aspects of health and disease,
- the ethical principles in medical theory and practice.

SKILLS

Doctor of Medicine must possess the following skills:

- taking a relevant medical history and determining patient status,
- following differential diagnostic procedures based on the medical history and patient examination,
- performing specific interventions,
- assessing and managing emergency situations,
- planning the treatment concerning common conditions.

COMPETENCIES

Doctors of medicine acquire the following competencies:

- They possess broad fundamentals of theoretical knowledge and practical skills, preparing them for any type of postgraduate education as well as for collaboration with other medical professionals.
- They have adopted attitudes concerning medical ethics.
- They are prepared for further development and advances within the field of medicine.
- They have acquired a systemic thinking approach as well as a structured approach to medical problems during their education.
- They fulfill the legal requirements for a career in the field of medicine and are eager to accept responsibility associated with medical knowledge concerning additional professional education.
- They are acquainted with a specific diagnostic algorithm.
- They are capable of making appropriate therapeutic decisions.
- They are acquainted with the structure, organisation and financing of health systems.
- They are acquainted with methodology of scientific research.
- They are capable of acting in accordance with rational and scientific concepts and principles.
- They have an unbiased attitude towards new scientific methods in medicine.
- They are eager to dedicate themselves to the field of medicine and accept responsibility for the physical, mental and social well-being of their patients.
- They are respectful to the patients regardless of their gender, age, race, social and economic status, education, culture or religion.
- They advocate for the patient's right to participate fully in medical treatment decisions, including the right to the refusal of care or participation in the process of education and scientific research.
- They are capable of expressing themselves and communicating in a manner that is both understandable and acceptable to the patient.
- They are prepared for accepting responsibility andapropriatemedical decision-making.
- They are acquainted with health improvementt and disease prevention and are eager to make medical professionals adopt more positive attitude towards it.
- They have adopted attitudes and gained understanding of their personal limitations in accordance with the previous education and experience.
- They are eager to collaborate with other medical professionals.
- They are able to achieve effective teamwork and develop leadership skills.
- They are conscious of the necessity for continuous learning and improvementt process to maintain a high level of medical competence.

- They are eager to train the colleagues and improve their own teaching skills.
- They are eager to support quality assurance measures and periodic evaluation of their own medical competences and knowledge standards.
- They are eager to react constructively to the outcomes of assessment- criticism and praise.
- They are eager to consider the changes in socioeconomic factors during the treatment process.
- They adhere to legal requirements regarding ongoing theoretical and practical training.

2.2.2. Structure of the study program and academic subjects

DISTRIBUTION OF *ECTS* CREDITS ACCORDING TO SUBJECT GROUPS
/list of core and elective subjects/

<table>
<tr><th>Group of subjects</th><th>ECTS (minimum)</th></tr>
<tr><td>1. A grup of generic core subjects
Cell biology and human genetics, Medicine and society, English 1, English 2</td><td>21</td></tr>
<tr><td colspan="2">Description of learning outcomes
- describe the main achievements of Hippocratic medicine; explain the etymology of basic medical terms; explain the determinants of health and their impact on it, define the concept of developmental psychology, become acquainted with the ethical principles in health systems.

Competencies
- They have adopted attitudes concerning medical ethics.
- They are prepared for further development and advances within the field of medicine.
- They are respectful to the patients regardless of their gender, age, race, social and economic status, education, culture or religion.</td></tr>
<tr><td>2. A group of generic core subjects specific to the study program
Anatomy, Histology and embriology, Medical biochemistry with chemistry, Physiology, Immunology, Microbiology, Pathology, Pathological physiology, Epidemiology, General pharmacology, Medical statistics, Methodology of scientific research</td><td>128</td></tr>
<tr><td colspan="2">Description of learning outcomes

- integrate the medicine-based scientific fields, and describe, differentiate, and apply scientific methods including the principles of measuring biological functions, evaluation of scientific facts, and data analysis.

Competencies</td></tr>
</table>

<table>
<tr><th>Group of subjects</th><th>ECTS (minimum)</th></tr>
<tr><td colspan="2">- They are capable of acting in accordance with rational and scientific concepts and principles.
- They have completed an academic education enabling them to develop scientific thinking skills.
- They are eager to collaborate with other medical professionals.</td></tr>
<tr><td>3. A group of core subjects specific to the study program
Clinical practice 1 and emergency medical help, Clinical practice 2, Radiology and nuclear medicine, Clinical propedeutics, Special pharmacology and toxicology, Internal medicine, Infectious diseases with special epidemiology, Neurology, Psychiatry, Dermatovenerology, Clinical microbiology, Surgery, Pediatrics, Gynecology, Physical medicine and rehabilitation, Social medicine, Clinical oncology, Ophthalmology, Otorhinolaryngology with maxillofacial surgery, Clinical pharmacology, Family medicine, Hygiene with medical ecology, Occupational medicine, Forensic medicine, Emergency medicine</td><td>174</td></tr>
<tr><td colspan="2">Description of learning outcomes
- describe, explain, and relate healthy individuals to sick population in term of their structure, function, and behavior, as well as describe, explain and relate the impact of the physical and social environment on human health.
- differentiate and connect clinical areas and adequately and critically select procedures to allow obtaining a comprehensive picture of social and physical diseases, as well as the prevention, diagnosis and treatment principles in medicine.
Competencies
- They possess broad fundamentals of theoretical knowledge and practical skills, preparing them for any type of postgraduate education as well as for collaboration with other medical professionals.
- They have acquired a systemic thinking approach as well as a structured approach to medical problems during their education.
- They are acquainted with a specific diagnostic algorithm.
- They are capable of making appropriate therapeutic decisions.
- They are eager to dedicate themselves to the field of medicine and accept responsibility for the physical, mental and social well-being of their patients.
- They advocate for the patient's right to participate fully in medical treatment decisions, including the right to the refusal of care or participation in the process of education and scientific research.
- They are capable of expressing themselves and communicating in a manner that is both understandable and acceptable to the patient.
- They are prepared for accepting responsibility andapropriatemedical decision-making.
- They are acquainted with health improvementt and disease prevention and are eager to make medical professionals adopt more positive attitude towards it.
- They have adopted attitudes and gained understanding of their personal limitations in accordance with their previous education and experience.
- They are conscious of the necessity for continuous learning and improvement process to maintain a high level of medical competence.</td></tr>
</table>

Group of subjects	*ECTS* (minimum)
4. A group of generic and elective subjects specific to the study program Medical terminology and Latin, Informatics in medicine, Biophysics, Communication skills, Biomarkers of oxidative stress, Possibility of applying bacteria for practical purposes, Nutrition physiology, Physiology of sport, New methods in radiology, Pathophysiological aspects of functional diagnostics, Clinical autopsy, analysis and importance, Medical psychology, Intrahospital infections and their prevention, Clinical immunology, Health management, Clinical pharmacokinetics and rational pharmacotherapy, Geriatrics, Pain medicine, Palliative care, Clinical pathology	**10**
Description of learning outcomes - achieving high quality results and reliability in healthcare in accordance with existing guidelines, leading to patient well-being **Competences** - They are eager to collaborate with other medical professionals. - They are able to achieve effective teamwork and develop leadership skills. - They are conscious of the necessity for continuous learning and improvementt process to maintain a high level of medical competence. - They adhere to legal requirements regarding ongoing theoretical and practical training. - They are acquainted with the structure, organisation and financing of health systems.	
5. professional practice Clinical practical training	**20**
Description of learning outcomes - critically evaluate, select, and apply preventive measures, diagnostic and therapeutic procedures aimed at preventing diseases, improving health status or recovering completely. **Competences** - They fulfill the legal requirements for a career in the field of medicine and are eager to accept responsibility associated with medical knowledge concerning additional professional education. - They have acquired a systemic thinking approach as well as a structured approach to medical problems during their education. - They are acquainted with a specific diagnostic algorithm. - They are capable of makingapropriatetherapeutic decisions. - They are eager to dedicate themselves to the field of medicine and accept responsibility for the physical, mental and social well-being of their patients. - They advocate for the patient's right to participate fully in medical treatment decisions,	

Group of subjects	*ECTS* (minimum)
including the right to the refusal of care or participation in the process of education and scientific research. - They are capable of expressing themselves and communicating in a manner that is both understandable and acceptable to the patient. - They are prepared for accepting responsibility andapropriatemedical decision-making. - They are acquainted with health improvementt and disease prevention and are eager to make medical professionals adopt more positive attitude towards it. - They have adopted attitudes and gained understanding of their personal limitations in accordance with the previous education and experience. - They are eager to collaborate with other medical professionals. - They are able to achieve effective teamwork and develop leadership skills. - They are conscious of the necessity for continuous learning and improvementt process to maintain a high level of medical competence. - They are eager to support quality assurance measures and periodic evaluation of their own medical competences and knowledge standards. - They are eager to react constructively to the outcomes of assessment- criticism and praise. - They are eager to consider the changes in socioeconomic factors during the treatment process.	
6. Final work/project	**7**
Description of learning outcomes - The students will be qualified to conduct scientific research. **Competencies** - They are acquainted with methodology of scientific research. - They have an unbiased attitude towards new scientific methods in medicine. - They are eager to train the colleagues and improve their own teaching skills.	

2.2.3. The curriculum of the study program

The curriculum is presented in the Faculty of Medicine Report, Section 6.

2.2.4. The structure of the study program

The structure of the study program, i.e. syllabi, are presented in Appendix 1.

2.3. RELEVANCE

2.3.1 LABOUR MARKET

The possible employment subject are:

- healthcare institutions,
- educational institutions within medical and biomedical fields,
- regulatory bodies,

- institutes and centers.

2.3.2 Further education/progression

Having completed integrated academic studies, a doctor of medicine can pursue further study by:
- specialising in certain field of medicine,
- enrolling in doctoral studies (third-cycle academic study) .

2.3.3 Other needs

2.4. University regulations

- The Statute of the University of East Sarajevo
- The Study Rules for the First Study Cycle

2.5. Specific qualification standards

Qualifications framework for Bosnia and Herzegovina

2.6. Teaching methods

Lectures, exercises, interactive teaching activities, seminar papers, midterm exams.

2.7. Grading policy

Grading policy is established in accordance with The Study Rules for the First Study Cycle, legislated by the University of East Sarajevo.

2.8. Grading criteria

Grading criteria are established in accordance with The Study Rules for the First Study Cycle, legislated by the University of East Sarajevo.

2.9. Learning resources

Literature, teaching aids in preclinical medicine, practical training in clinical medicine, all-hours access reading room, library and internet.

2.10. Employability and transferable skills

Upon completing their studies, doctors of medicine can be employed by higher-educational institutions, primary healthcare centers and private practices.

2.11. Student support

- professors and associates are available for regular appointment consulting service and assistance;
- necessary equipment and materials are provided by the Faculty;
- students participate in the evaluation of the teaching process through student survey questions conducted at the end of each semester;
- students are members of the Teaching-Scientific Council.

2.12. Competency matrix – connection with external reference descriptors

Competency matrix is presented in Appendix 3.

2.13. Quality assurance

Quality assurance for the integrated academic studies in Medicine is accomplished by:

- regular curriculum evaluation as well as the implementation of continuous corrective and preventive measures,
- self-evaluation.

2.13.1. **Academic staff responsible for quality assurance of the curriculum**

Academic staff responsible for quality assurance of the curriculum are the following: the dean, the vice-deans as well as quality assurance coordinator.