



ASIIN Seal

Accreditation Report

Undergraduate Programme for Medical Doctor

Provided by:

**Mongolian National University of Medical
Sciences, Ulaanbaatar**

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A About the Accreditation Process

Name of the degree programme (in original language)	(Official) English translation of the name	Labels applied for ¹	Previous accreditation (issuing agency, validity)	Involved Technical Committees (TC) ²
Хүний их эмч” бэлтгэх хөтөлбөр	Undergraduate Programme for Medical Doctor	ASIIN	ASIIN, until 31.12.2022	14
<p>Date of the contract: 11.08.2021</p> <p>Submission of the final version of the self-assessment report: 28.02.2022</p> <p>Date of the online audit: 06.09. – 08.09.2022</p>				
<p>Peer panel:</p> <p>Prof. Dr. Eka Ekaladze, Tbilisi State Medical University, Georgia</p> <p>Prof. Dr. Hans-Joachim Wagner, Tübingen University</p> <p>Dr. med. vet. Melanie Simon, RWTH Aachen</p> <p>Mareike Krause, University Rostock, student</p>				
<p>Representative of the ASIIN headquarter:</p> <p>Rainer Arnold</p>				
<p>Responsible decision-making committee:</p> <p>Accreditation Commission for Degree Programmes</p>				
<p>Criteria used:</p> <p>European Standards and Guidelines as of 15.05.2015</p> <p>ASIIN General Criteria as of 28.03.2014</p>				

¹ ASIIN Seal for degree programmes;

² TC: Technical Committee for the following subject areas: TC 14 – Medicine

Subject-Specific Criteria of Technical Committee 14 – Medicine as of 20.09.2019	
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B Characteristics of the Degree Programmes

a) Name	Final degree (original/English translation)	b) Areas of Specialization	c) Corresponding level of the EQF ³	d) Mode of Study	e) Double/Joint Degree	f) Duration	g) Credit points/unit	h) Intake rhythm & First time of offer
Undergraduate Programme for Medical Doctor	Bachelor of Science, MD	-	6	Full time	No	6 years	207 Mongolian Credit Points 331.2 ECTS	Fall semester / 1942

For the Undergraduate Programme for Medical Doctor, Mongolian National University of Medical Sciences (MNUMS) has presented the following profile in the Self-Assessment Report:

“Bachelor Degree programme for Medicine is a complex document that offers a day-time, student-centred, competency based, block integrated, 207-credit hours undergraduate programme that is designed to prepare a “Medical Doctor” who has an appropriate level of knowledge, clinical skills, and professional ethics and attitudes to work ethically and effectively in health care services and the curriculum prepares the students for lifelong learning.”

³ EQF = The European Qualifications Framework for lifelong learning

C Analysis and Findings of Peers

1. Mission and Outcomes

Criterion 1.1 Statements of purpose and outcome
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Evidence:

- Self-Assessment Report
- Webpage MNUMS: <http://www.mnums.edu.mn/>
- Webpage Undergraduate Programme Medicine: http://www.mnums.edu.mn/?page_id=26041
- Sample Diploma Supplement
- Discussions during the audit

Preliminary assessment and analysis of the peers:

As stated in the Self-Assessment Report, MNUMS “aims to become a leading research university that fully meets the demands of the population in health care and produces humane, compassionate, highly ethical, competent, and mature doctors, the combined embodiment of research, training and health services.” Furthermore, the MNUMS development policy 2021-2030 includes “preparing globally competitive doctors and medical professionals, creating a learning-friendly environment, establishing a world-class university campus, developing university hospital system, and bringing it up to the international standards” as a main goal.

The Undergraduate Programme for Medical Doctor has the goal of educating general practitioners, who are capable of improving the health of the population, implementing disease prevention measures, conducting public health training, diagnosing and treating common diseases, providing emergency medical care, having knowledge of family medicine, adhering to medical ethics and state laws, and working in all areas of primary health care.

In addition, MNUMS wants to “train doctors, who are humane and caring, who possess the qualities of compassion high ethical standards, values, and are flexible and convertible as experts and doctors who conform to international standards and meet the need of the public health.” To accomplish these goals, courses in communication skills, behavioural skills, medical ethics, and medical law are part of the curriculum. The clinical training is

aimed at acquiring the necessary specific skills and attitudes of a physician to perform at a professional level of competence on a daily basis in health care institutions.

In general, the peers consider the intended learning outcomes of the Undergraduate Programme for Medical Doctor to be well founded and reasonable.

Criterion 1.2 Participation in the formulation of mission and outcomes

Evidence:

- Self-Assessment Report
- Discussions during the audit

Preliminary assessment and analysis of the peers:

According to the Self-Assessment Report, internal (programmes coordinators, teachers, and students) as well as external stakeholders (alumni, employers) are involved in formulating and further developing the objectives and intended learning outcomes of the Undergraduate Programme for Medical Doctor. Input from the stakeholders is important for taking different aspects such as the labour market needs, recent healthcare regulation in Mongolia, and current developments in healthcare into account. In addition, the intended learning outcomes are in accordance with the recommendations of global and regional organisations such as the World Federation for Medical Education (WFME), the World Health Organisation (WHO), the Mongolian National Council for Education Accreditation, the Western Pacific Association for Medical Education, and the Institute for Medical Education of the University of Groningen, Netherlands.

As part of the quality assurances processes, student, graduate, and employer satisfaction surveys are regularly conducted to evaluate the achievement of the intended learning outcomes and the quality of the teaching and learning processes.

The purpose and objectives of the curriculum are determined and constantly updated by the MNUMS administration, faculty staff, students, alumni, and employers.

The peers confirm that there is a well described and established process for designing and validating the objectives and learning outcomes. All relevant stakeholders are involved in the process.

Criterion 1.3 Institutional autonomy and academic freedom
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Evidence:

- Self-Assessment Report
- Discussions during the audit

Preliminary assessment and analysis of the peers:

MNUMS and the School of Medicine are fully responsible for the implementation of the Undergraduate Programme for Medical Doctor. MNUMS, through its president and the involved committees is entitled to take an active part in curriculum design, change, and evaluation. Moreover, the School of Medicine has its own regulatory framework to reform and change the curricula independently. In other words, MNUMS and the School of Medicine are able to formulate and implement policies and degree programmes according to their own agenda. Thus, academic freedom is given.

Final assessment of the peers after the comment of the Higher Education Institution regarding criterion 1:

MNUMS does not comment on this criterion in its statement.

The peers consider criterion 1 to be fulfilled.

2. Educational Programme

Criterion 2.1 Curriculum model and instructional methods

Evidence:

- Self-Assessment Report
- Study Plan
- Module descriptions
- Webpage MNUMS: <http://www.mnums.edu.mn/>
- Webpage Ba Medicine: http://www.mnums.edu.mn/?page_id=26041
- Discussions during the audit

Preliminary assessment and analysis of the peers:

The Undergraduate Programme for Medical Doctor was established in 2010 and was further developed in 2013 and 2016. The current curriculum is a 6-year programme that comprises a two-year premedical stage and four-year professional and clinical stage with six integrated blocks, which integrate theoretical courses with clinical problems.

The curriculum includes lectures and small group teaching as well as practical hands-on experience through clinical rotations in hospitals.

The first two years of the medical programme are called basic courses for medical education. Aim of the courses is to equip students to have a solid foundation of basic science and humanity knowledge and skills. The premedical stage consists of 31 courses and introductory training. Mandatory course includes biology, general (inorganic) chemistry, organic chemistry, physics, physiology, histology, molecular biology, pathology, basic physical examination of internal medicine, clinical laboratory, and radiology.

Four credits of elective courses should be taken, so students need to select other courses in the sciences and humanities to supplement this core curriculum, enhancing their knowledge. The premedical stage includes basic science courses for freshmen, which are intended to give the students basic knowledge on general science needed for undertaking higher education, and to lay the foundation for further studying professional courses. Basic professional courses are generally studied during years I, II with the goal to impart the necessary competences in basic medical education. The content, the selection and the sequence of the courses are decided by the stipulations of the educational policy of the MNUMS.

At the end of the second year the students must decide, which branch of medical studies they want to pursue. They have the choice between Medical Doctor, Dentistry, Traditional Medicine, Biomedical Research, Public Health, Pharmacy, and Acupuncture. If the number of applicants to a particular programme exceeds its capacity, students will be ranked according to their academic performance (grade point average in the first two years); and lowest ranking students may not be accepted to their first-choice programme.

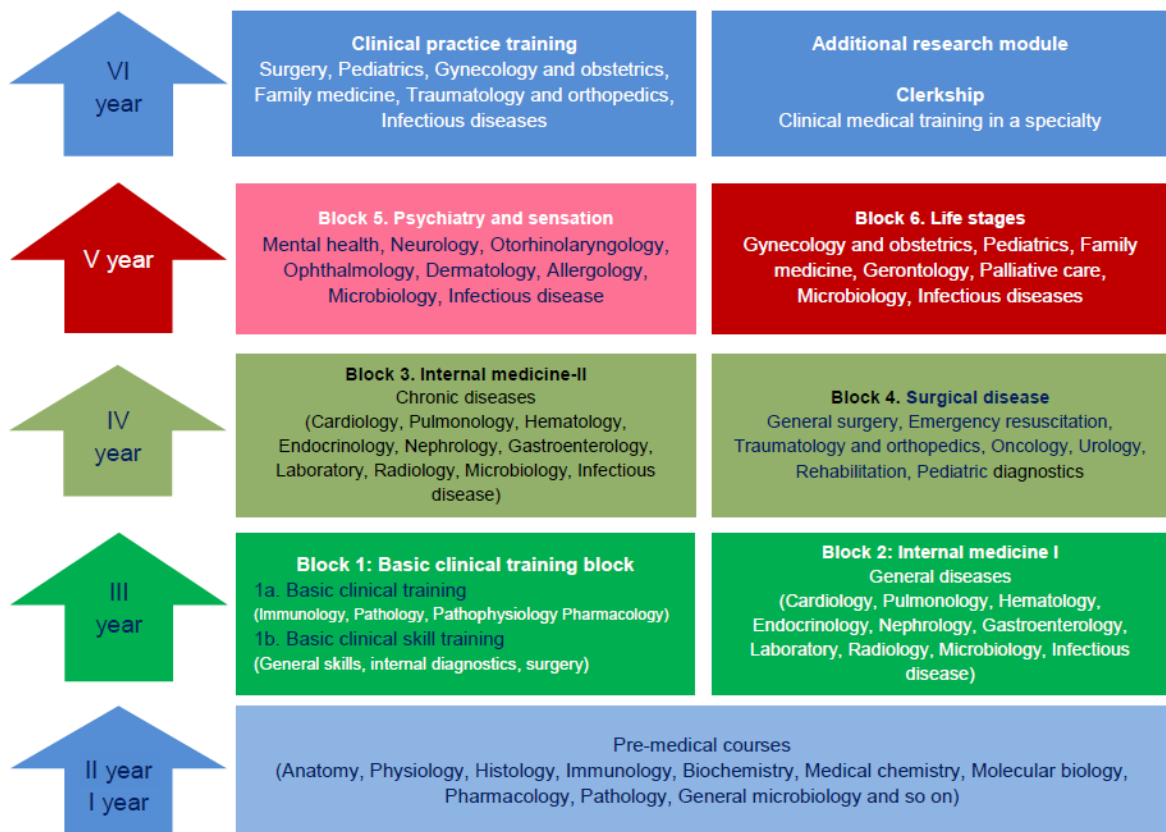
From second to fifth year, the students study in various forms of the integrated block curriculum that consists of six blocks of medical courses:

- BLOCK – IA Preclinical courses (pathology, pathophysiology, immunopathology, and pharmacology)
- BLOCK - IB Basics of clinical medicine (diagnostics of internal medicine, general surgery, emergency care, clinical laboratory and general hygiene)
- BLOCK - II Internal medicine 1 (gastroenterology diseases, cardiology, endocrinology, haematology, pulmonology, nephrology, rheumatology, radiology, tuberculosis, clinical microbiology, medical genetics, ethics and biostatistics)

- BLOCK - III Internal medicine 2 (gastroenterology diseases, cardiology, endocrinology, haematology, pulmonology, nephrology, rheumatology, radiology, tuberculosis, clinical microbiology, medical genetics, ethics and biostatistics)
- BLOCK - IV Surgery (surgical diseases, trauma, emergency medical care and anaesthesia, urology, epidemiology, oncology, paediatric surgery, clinical microbiology, paediatrics, radiology, and rehabilitation)
- BLOCK - V Psycho-neuro-sensory neurology, dermatology, microbiology, ophthalmology, rehabilitation medicine, psychiatry or mental health, allergology, infectious diseases, and otorhinolaryngology)
- BLOCK - VI Life cycle (obstetrics and gynaecology, paediatrics, family medicine, mental health, and infectious diseases)

During the final year of the degree programme, students complete their clerkship at the different affiliated hospitals. The students learn how to make correct diagnoses, suggest adequate treatments and to conduct the medical procedures of health monitoring, disease prevention, rehabilitation and emergency care. They get the chance to practice their medical knowledge and become acquainted with the everyday routines of a physician. Clinical rotations during the clerkship are organized with the purpose of giving the students the opportunity to encounter common diseases in Mongolia, such as in internal medicine, paediatrics, communicable diseases, obstetrics and gynecology, traumatology and orthopedics, family medicine, emergency and anesthesiology and general surgery. The students also attend seminars and lectures in order to be informed about the latest developments in medicine.

The structure of the Undergraduate Programme for Medical Doctor is depicted in the following diagram:



Source: MNUMS Self-Assessment Report

The peers point out that the current curriculum is not fully integrated yet, as the subjects are taught separately. It would be more appropriate to call it a problem-based curriculum, where teaching focusses on presenting and discussing medical problems in small groups under a teacher's supervision.

During the audit, the peers learn that, in addition to the "regular" class, which is taught in Mongolian, the School of Medicine also offers an English class in the Undergraduate Programme for Medical Doctor. The English class is offered from 3rd to 6th year and currently there are 165 students enrolled in the English classes. The requirements for entering the English class are an official English language proficiency certificate, an entrance examination, and an interview session. As the students confirm in the discussion with the peers, even in the "regular" classes English textbooks and papers are used.

The programme has the following modes of teaching: lectures, small group teachings, clinical skills sessions, simulation sessions, clinical rotations, tutorials, and seminars. Audio-visual aids and e-learning supplement the attendance-based classes. Problem and project-based learning and a student-centred teaching approach are applied in most of the advanced courses. These methods comprise several steps, which requires students to gather information, solve problems, make reports, and discuss and present the results. These teaching methods focus on analysing problems and acquiring the skills to draw conclusions based on evidences. In addition, students should learn to work together in a team, to design their learning goals, and to take responsibility for their implementation.

Teachers instruct classes at hospitals near the patient's bedside (bedside teaching). This teaching method allows students to gain practical medical experiences such as interacting with patients, working in authentic conditions, learning from medical practitioners and collecting and analysing information about a patient in a short time.

The peers see that the applied teaching methods are state of the art including PBL and Bloom's cognitive taxonomy. Special regards have been paid to the Covid-related situation where student-centred e-learning has taken up to 50 % of the classes.

While looking at the homepage of the medical programme, the peers notice that all information available there still refers to the "old" curriculum before the latest update in 2016. In addition, essential information about the degree programme (intended learning outcomes, curriculum, module descriptions etc.) are not provided on the programme's webpage. The peers expect MNUMS to update the homepage and to make all essential information about the degree programme available to all stakeholders. Best would be to publish them on the programme's webpage.

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In addition, the peers point out that all relevant documents and regulations concerning the Undergraduate Programme for Medical Doctor need to be available in an English translation. This is particularly important in view of the fact that there is an English class.

Finally, the peers emphasise that it is necessary to improve the integration of the premedical and clinical courses. Currently, the courses in the first two years are taught separately without a close connection to the clinical course. The communication and interaction between the respective teachers should be increased, in order to better align and integrate the premedical subjects with the clinical content. For example, it would make sense to familiarise students with basic practical medical skills as early as the premedical stage of their studies, and to promote the consolidation and cognitive networking of theoretical and practical content in interactive teaching.

In summary, the peer group judges the teaching methods and instruments to be suitable to support the students in achieving the intended learning outcomes.

Criterion 2.2 Scientific method

Evidence:

- Self-Assessment Report
- Study Plans
- Module descriptions
- Discussions during the audit

Preliminary assessment and analysis of the peers:

The current MNUMS Development Policy 2021-2030 aims at expanding the university's research capabilities and output by creating a research friendly environment, by improving the laboratories, and by better supporting the teaching staff to conduct research activities. To this end, MNUMS has established the interdisciplinary Institute of Biomedical Sciences in November 2021. It consists of the Clinical Molecular Diagnostic Center, a Pathology Laboratory, a Laboratory of Cellular Biology, and the Laboratory of Neuroscience.

In addition, the Student Research Association has successfully organised the Student Scientific Conference five times since 2016 and five conference proceedings (a collection of academic papers) with 98 clinical presentations and papers that were presented at the conference have been published.

Furthermore, there are several students' organisations and clubs at MNUMS, which offer students the opportunity of expanding their knowledge, attitudes, and skills to become scientifically minded professionals who are familiar with modern technologies. Students' clubs and associations have common goals such as improving students' ability to work independently and in a team, carrying out research activities, developing critical thinking, and organising humanitarian and social activities.

With respect to the Undergraduate Programme for Medical Doctor, the peers see that all 5th-year medical students have to develop and present their research projects as part of the curriculum. In the course of this project, students choose the topic, search for and read relevant literature, gather relevant evidence, and prepare the presentation. Students can choose their projects in the main directions of the research work in the 24 departments of the School of Medicine and the teachers supervise and advise the students' research work.

However, it would be more useful in terms of research activities if all students would be required to write a Bachelor's thesis before starting with the clerkships. For example, the group projects, which students join, could be expanded to a Bachelor's thesis under the supervision of a teacher whose research interests are in the same area. In addition, it would very useful, if the course "research methodology" was compulsory for all students and offered already in the third year. This way, all students should learn how to design a research project, to conduct literature research, to observe the rules of good scientific practice, to carry out experiments, and to present the results.

Criterion 2.3 Basic Biomedical Sciences

Evidence:

- Self-Assessment Report
- Study plan
- Module descriptions
- Discussions during the audit

Preliminary assessment and analysis of the peers:

The curriculum of the Undergraduate Programme for Medical Doctor is designed to provide the integration of basic sciences and clinical sciences in a balanced way. General basic subjects include anatomy, physiology, histology, pathology, biochemistry, microbiology, immunology, molecular biology, genetics and pharmacology. In addition, students can also choose elective courses out of the following areas: behavioral and social sciences, medical ethics, humanitarian sciences and public health. The basic science courses during the first academic year are designed to give the students a basic knowledge on the natural sciences that lay a solid academic foundation for further studies of advanced medical courses. Clinical sciences and professional subjects are dominant in the final semesters.

Criterion 2.4 Behavioural and social sciences and medical ethics

Evidence:

- Self-Assessment Report
- Study plan
- Module descriptions
- Discussions during the audit

Preliminary assessment and analysis of the peers:

Behavioural and social sciences including areas such as humanities (6 credits), social sciences (6 credits), and civic education (3 credits) are offered to all medical students in the first two years of studies. The goal is to familiarise students with philosophical and literary texts, general artistic and aesthetic considerations, and ethical values. In addition, students should learn about economics, legal regulations, cultural diversity and interpersonal relationships, Mongolian history, culture, and politics.

The peers confirm that students of the Undergraduate Programme for Medical Doctor are well educated in social sciences and ethics.

Criterion 2.5 Clinical sciences and skills

Evidence:

- Self-Assessment Report
- Study plan
- Module descriptions
- Discussions during the audit

Preliminary assessment and analysis of the peers:

Clinical sciences and skills are introduced during the Undergraduate Programme for Medical Doctor through students' exposure to the clinical setting and through the provision of a clinical environment. Bedside teaching in small groups as well as simulation equipment (mannequins etc.) are used to expose students to the application of clinical science.

Supplementing the lectures, small group teaching (clinical skills sessions, simulation sessions and case-based scenarios) is conducted during the clinical blocks and the clerkship stage of the Undergraduate Programme for Medical Doctor. Students are required to attend clinical placements on rotation basis in the different medical areas.

In addition, students attend clinical summer practice (internship) in affiliated hospitals. This includes care and nursing practice for 14 days, internal medicine practice for 21 days, and obstetrics, gynaecology, surgery, and paediatrics practice for 28 days.

MNUMS has opened a new clinical skills centre in 2020/21, which is equipped with modern equipment that provides an e-learning virtual environment and enables students to receive clinical training in real-time. Clinical training of the students is conducted in the MNUMS “Mongolia-Japan Hospital” and the “Central Hospital”. The School of Medicine enjoys the right of having institutional autonomy to develop and implement policies related to the formation and use of internal resources through adequate allocation. The new 6-storey building of the School of Medicine was commissioned in 2019. In the same year, buildings for the Schools of Nursing, Pharmacy, and Dentistry were built. In addition, a building for the International School of Mongolian Medicine and a traditional hospital with 80 beds was opened.

Most of the Faculty’s academic staff members have a number of years of clinical experience and are actively involved in treating patients. Medical students can study at “Mongolia-Japan Hospital” and the “Central Hospital” and the medical staff there serves as clinical lecturers at MNUMS. In addition, cooperations with other hospitals are established to ensure a close student-patient interaction.

During the discussion with MNUMS’s partners from the medical sector, the peers learn that the employers are generally satisfied with the graduates’ skills and knowledge. However, they point out that it would be very useful for the medical students to get more hands-on experience with patients during the clerkships. For example, this could be achieved by organising smaller student groups for the clerkships or increasing the time for students-patients contact.

Criterion 2.6 Curriculum structure composition and duration

Evidence:

- Self-Assessment Report
- Study plans
- Module descriptions
- Discussions during the audit

Preliminary assessment and analysis of the peers:

The curriculum of the Undergraduate Programme for Medical Doctor consists of 207 credits hours, which is equivalent to 9936 hours (331.2 ECTS points) in 12 semesters. The first

two years of study cover basic medical education whereas the remaining four years comprise integrated block studies.

The programme's content and structure can be divided into general basic, professional basic, and professional subjects according to subject level and credit. The following table shows the content, level, and classification of the Undergraduate Programme for Medical Doctor in its current version:

Nº	Subject	Classification	Total credit	Percentage
I.	Level	General basic subjects	59	28.5
		Professional basic subjects	37	17.9
		Professional subjects		
		Block training	82	39.6
		Clinical training	19	9.2
		Practical subjects	10	4.8
II.	Content	Compulsory subjects	178	86.0
		Elective courses	29	14.0
III.	Type	Auditory classes		
		Lecture	27.4	13.3
		Practice	66.9	32.3
		Seminar	16.1	7.8
		Non auditory classes		
		Self- study	96.4	46.6

Source: MNUMS Self-Assessment Report

The peers confirm that the Undergraduate Programme for Medical Doctor is presented in a modular form; it is a block-integrated programme that was developed in order to enhance the consistency and continuity in medical courses. The integrated curriculum model is organised to enable the integration of basic sciences and medical sciences into one block course. This model is oriented towards problem solved learning, student centered training, multidisciplinary courses and extensive clinical practice.

Criterion 2.7 Programme management

Evidence:

- Self-Assessment Report
- Discussions during the audit
- Academic Study Guides

Preliminary assessment and analysis of the peers:

The School of Medicine manages Undergraduate Programme for Medical Doctor. For further developing the programmes according to national and international standards, workshops with internal (students and lecturers) and external stakeholders (alumni, representatives of professional associations, and regional health officials) are regularly conducted. The Curriculum Committee then reviews the curriculum design. The main task of this team is to review and provide suggestions to the proposed curriculum. The reviewed curriculum then needs to be approved by MNUMS's management.

Criterion 2.8 Linkage with medical practise and the health sector

Evidence:

- Self-Assessment Report
- Study plan
- Module descriptions
- Discussions during the audit

Preliminary assessment and analysis of the peers:

Students at the School of Medicine learn from the beginning of their studies how to interact with patients and doctors in hospitals and health care centres. The peers confirm that there is a good cooperation between MNUMS and hospitals and health care centres.

Final assessment of the peers after the comment of the Higher Education Institution regarding criterion 2:

The peers confirm that MNUMS has updated the programme's homepage, which now includes the essential information about the degree programme (curriculum, module descriptions etc.).

The peers support the plan to increase the time of contact between students and patients. They point out that it would be very useful for the medical students to get more hands-on experience with patients during the clerkships.

The peers consider criterion 2 to be mostly fulfilled.

3. Assessment of Students

Criterion 3.1 Assessment methods

Evidence:

- Self-Assessment Report
- Study plan
- Module descriptions
- Discussions during the audit

Preliminary assessment and analysis of the peers:

Different assessment forms such as clinical based tests, oral examinations, essay writing, written examinations, Multiple Choice Questions (MCQ), and computer-based test are used in assessing students' knowledge. Objective Structured Clinical Examinations (OSCE), Objective Structured Practical Examinations (OSPE), station-based examinations, Clinical Evaluation Exercises (mini-CEX), and Direct Observation of Procedural Skills (DOPS) are used in assessing student practical and clinical skills.

During the courses of the first and second year of studies, students are evaluated by continuous assessments such as essay writing, participation, discussions, and quizzes. This formative assessment contributes 70 % to the final grade. The final exam at the end of the semester (usually a written exam) contributes 30 % to the final grade.

Before entering the clinical stage of the medical programme, students are assessed by the summative examination in basic medical sciences that takes place at the end of the second year of the degree programme. From the 3rd year on, students are assessed in each of the blocks and have to pass the respective clinical and practical examinations.

There are altogether three OSCE examinations to assess the students' practical skills and medical knowledge by using patient dummies and tools in a simulated environment. OSCE provides the opportunity also to assess the student's communication skills and his ability to do anamnesis and make suggestions for an appropriate treatment. Generally, each OSCE has 6-8 stations, each station taking 6-8 minutes. The evaluator has a checklist to evaluate the student's communication and clinical skills. The student will get points each time he performs the required actions.

The final year students are assessed during the clerkship through OSPE I and OSPE II and at the end of the degree programme through OSCE-III and the final theoretical exam.

After completing 31 weeks of clinical practise training (clerkship) the 6th year students will be eligible to enter OSPE. The purpose of OSPE is to assess the students’ knowledge, skills and competencies in four stations: anamnesis, physical examination, diagnosis, treatment, and consultancy. The exam lasts five minutes in each station; the examination questions are submitted by the professional departments involved in the clinical rotations. The exam is organised twice per academic year.

The structure and form of assessment in the different years is depicted in the following table:

I-II year	III year	IV year	V year	VI year
Pre-medical course	Block 1-3	Block 4, 5	Block 6	Clinical Practice Training (CPT)
There are 33 examinations, and each subject has examination.	Each subject has formative assessment.			
	There is integrated examination at the end of each block			OSPE I, II Graduate test and procedural OSCE III

Source: MNUMS Self-Assessment Report

If a student fails a block course (less than 60 % of the required points), there is a second chance for examination. The student may repeat the block in the way of a summer course if sufficient attendance (25 %) was not achieved (illness etc.). There is a general schedule for re-examinations and a regulation for exams. Each subject of the block course must be completed before taking the final exam, and only a failed subject needs to be repeated.

The peers confirm that there is a form of assessment for each course and that all students are well informed about the form of assessment and the details of what is required to pass the course. The organization of the exams guarantees that delays in the study progress are avoided. The relevant rules for examination and evaluation criteria are put into a legal framework, as both students and lecturers confirm in the audit discussions. The date and time of the exams and how the exams are taken is announced to the students in due time at the beginning of each semester.

Criterion 3.2 Relation between assessment and learning

Evidence:

- Self-Assessment Report
- Study plans
- Module descriptions

- Discussions during the audit

Preliminary assessment and analysis of the peers:

In the Undergraduate Programme for Medical Doctor, assessments are conducted in accordance with the intended learning outcomes. For example, for several basic biomedical courses in which the level of competency focuses on understanding, the assessment methods are multiple choice tests and laboratory examinations. Moreover, for courses with a focus on clinical skills, the chosen assessment method is usually a practical skills examination or OSCE.

The methods of assessment are indicated in the module descriptions. In addition, the examination form is communicated to the students at the beginning of the course.

Final assessment of the peers after the comment of the Higher Education Institution regarding criterion 3:

MNUMS does not comment on this criterion in its statement.

The peers consider criterion 3 to be fulfilled.

4. Students

Criterion 4.1 Admission policy and selection

Evidence:

- Self-Assessment Report
- Admission Regulation for Undergraduate Programmes at MNUMS
- Discussions during the audit

Preliminary assessment and analysis of the peers:

As described in the Self-Assessment Report, admission to the Undergraduate Programme for Medical Doctor is based on the grades of the high school graduates. In order to be accepted at MNUMS, high school graduates must pass the University Entrance Examination (UEE) certificate from the Education Evaluation Center (EEC) and must achieve a certain grade in biology and chemistry. In general, applicants with the highest score will be accepted into MNUMS. However, due to the differences in population density in Mongolia, applicants from less-populated regions may be accepted with scores in UEE below the average score in highly populated regions.

Although the threshold score is 480, the average UEE score for students entering the MNUMS is relatively high, especially for medical students (542-662 points). This shows that there is a high demand for entering the Undergraduate Programme for Medical Doctor. The further details are described in the Admission Regulation for Undergraduate Programmes at MNUMS. International students can directly apply for admission at MNUMS.

In the academic year 2021/22, the tuition fee for the Undergraduate Programme for Medical Doctor was between 1250 € and 1082 € for the first five years of studies and 519 € for the sixth year. This amount is officially determined by MNUMS's Governing Board (steering committee) and is based on the amount of academic credits in the degree programme. International students pay a higher tuition fee, which is currently between 4000 and 2930 € per year. Usually, the students' parents pay the tuition fees.

MNUMS offers a scholarship scheme, which is designed to support gifted and talented students, as well as students with a weak economic background. Students with disabilities are also offered special scholarships based on their level of education and living conditions. The scholarships are used only for tuition fees. In the last five years, a total of 915 students have participated in the scholarship programme.

The schedule of admission, the requirements, and the procedures are published and can be accessed via MNUMS's homepage.

In summary, the auditors find the terms of admission to be binding and transparent. They confirm that the admission requirements support the students in achieving the intended learning outcomes.

Criterion 4.2 Student intake

Evidence:

- Self-Assessment Report
- Discussions during the audit

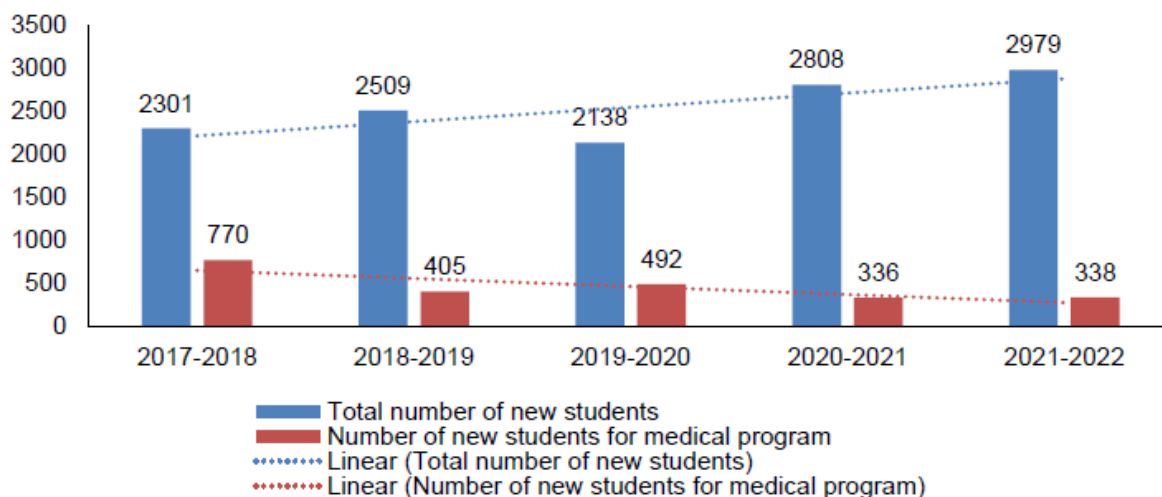
Preliminary assessment and analysis of the peers:

The number of available study places is determined annually by the Administration Board of MNUMS, which manages the day-to-day activities of MNUMS.

In recent years, MNUMS has been pursuing a policy to reduce new admissions according to the goal of decreasing the number of students allocated per teacher in compliance with the MNUMS development plan. As a result, in the last 5 years, the number of students

admitted to the Undergraduate Programme for Medical Doctor has halved from 770 in 2017 to 338 in 2021.

The number of newly admitted students in the last five year is depicted in following chart:



Source: MNUMS Self-Assessment Report

The number of annual student admission depends on the number of secondary school graduates in a given year, the morbidity status of the population, and the number of people allocated per doctor. Since there are already many medical doctors in Mongolia, the annual intake of new students in the Undergraduate Programme for Medical Doctor has significantly decreased within the last five years. However, the interest of high school graduates is still very high, because medical doctor is a very prestigious occupation. As a result, only around 25 % of the students at MNUMS that are interested in joining the Undergraduate Programme for Medical Doctor can enter the programme after their second year of studies.

Entrance into MNUMS in general and into the Undergraduate Programme for Medical Doctor in particular, is quite competitive with a very high ratio of applicants to actual accepted students. This reflects the high interest of prospective students in medical sciences and verifies the relevance of the programme.

Criterion 4.3 Student counselling and support

Evidence:

- Self-Assessment Report
- Discussions during the audit

Preliminary assessment and analysis of the peers:

The School of Medicine provides a support system for all students on different levels. It includes consultations with an officer for academic affairs about scholarships, graduation requirements and general study regulations and with an officer for student affairs about enrollment and job opportunities. On a more personal level, there is an advisor for each course. Her/his task is to motivate the students to participate in student clubs and to give advice on all questions concerning the social-humanitarian life of the students.

The elaborated system for support and assistance of the students is one of the strengths of MNUMS. The peers are very positively impressed by the student club system where older and more experienced students get in contact with young students and can pursue projects that are in their common interest. The clubs are usually affiliated with the different departments of MNUMS and offer the students the opportunity to broaden their scientific knowledge, to take part at team projects, and to develop their individual interests.

The peer group notices the good and trustful relationship between the students and the teaching staff; there are enough resources available to provide individual assistance, advice and support for all students. The support system helps the students to achieve the intended learning outcomes and to complete their studies successfully and without delay. The students are well informed about the services available to them.

Criterion 4.4 Student representation

Evidence:

- Self-Assessment Report
- Discussions during the audit

Preliminary assessment and analysis of the peers:

Curriculum design, monitoring, and evaluation is carried out by the Curriculum Committee, its members are appointed by the Dean. The peers observe that students at the School of Medicine participate in evaluating the Undergraduate Programme for Medical Doctor. The Student Union of the School of Medicine is consulted when changes are proposed. As the peers learn during the audit, students are not official members of the Curriculum Committee. This should be changed, because students should also be official members of the Curriculum Committee on programme level and thus have the opportunity to directly influencing and deciding on the further development of the medical programme. However, three students, who are elected by the student body, are members of the Governing Board of MNUMS.

The School of Medicine provides support, funding, and facilities for non-academic students' activities. Non-academic activities include student activities and student organizations at local, national and international levels. These activities aim to develop students' interests and talents to improve their skills.

Final assessment of the peers after the comment of the Higher Education Institution regarding criterion 4:

MNUMS does not comment on this criterion in its statement.

The peers consider criterion 4 to be fulfilled.

5. Academic Staff/Faculty

Criterion 5.1 Recruitment and selection policy

Evidence:

- Self-Assessment Report
- Staff handbook
- Study plan
- Module descriptions
- Discussions during the audit

Preliminary assessment and analysis of the peers:

Teachers at MNUMS have different academic positions. There are senior professors, professors, associate professors, lecturers, and associate lecturers. Teachers of Medicine, Biomedicine and Public Health teach the Undergraduate Programme for Medical Doctor. There are 132 teachers from 23 departments of the School of Medicine, 144 teachers from 16 departments of the School of Biomedicine and 48 teachers from 6 departments of the School of Public Health. In terms of teaching staff, 85 % are teachers from the medical programme and 15 % are teachers of other professions (biologists, chemists, physicists, mathematicians, epidemiologists, hygienists, statisticians, sociologists, philosophers, social workers, etc.).

With respect to the academic qualification, approximately half of the teachers at the School of Medicine hold a PhD degree (66 out of 132), whereas the rest has a Master's degree. As mentioned in the Self-Assessment Report, from the 324 teachers working in the Undergraduate Programme for Medical Doctor in the 2020/21 academic year, 34 (10.5 %) are

professors, 48 (14.8 %) are associate professors, 81 (25.0 %) are senior lecturers, and 161 (49.7 %) are full-time lecturers and associate lecturers. Complementing the permanent staff, international guest lecturers are regularly invited. In the last five years, there have been about 60 foreign visiting teachers and in 2021, there are 11 guest lecturers at MNUMS. In the other hand, seven teachers from MNUMS are currently working abroad as visiting professors. MNUMS is trying to increase the number of teachers with a PhD degree. For example, MNUMS supports and encourages teachers with a Master's degree in joining PhD programmes, either in Mongolia or abroad. In order to broaden the students' horizon especially in the field of research and current developments, international guest lecturers are regularly invited.

According to the Self-Assessment Report, the ratio of lecturers and active students was 1: 14.1 in the academic year 2016/17, which decreased to 1: 12.8 in 2020/21.

The peers discuss with MNUMS's management, how new staff members are recruited. They learn that there are several requirements for new teachers at MNUMS. They need to hold at least a Master's degree, have completed specialized medical training, have professional experience in the clinical field for at least three years, have worked in other medical fields for more than two years, show proficiency in computer applications, and have an advanced level of English proficiency. Teacher recruitment for MNUMS is organized by the Teacher Development and Human Resources Departments. The School of Medicine and the departments participate in the selection interviews. The Division of Teacher Development and E-Learning announces vacancies on the university's website, in newspapers, and social networks.

The peers notice that MNUMS has a large academic staff and is well-equipped for teaching. They confirm that the composition and qualification of the teaching staff is suitable to sustain the Bachelor degree programme and that there are enough resources available for administrative tasks and supervision and guidance of the students. However, the peers point out that MNUMS should increase its efforts to raise the number of teachers with a PhD degree. As mentioned before, approximately only half of the teachers at the School of medicine hold a PhD degree. This is quite low by international standards and the share should be significantly higher.

A very positive aspect is the combination of teaching at MNUMS and practical work at the hospitals. MNUMS pays the academic staff although they do not necessarily teach fulltime at the university but work part time as medical doctors. This allows for the integration of their professional experience into their courses and offers the opportunity for the students to gain first-hand knowledge of medical problems and treatments.

The auditors are impressed by the open-minded atmosphere among the students and the staff members and the dedication of the staff members in general. There is definitely no problem in terms of gender representation/parity, 70 % of the students are female and also among the staff, females are very well represented.

Criterion 5.2 Staff activity and development policy

Evidence:

- Self-Assessment Report
- Discussions during the audit

Preliminary assessment and analysis of the peers:

MNUMS encourages the training of its academic staff so it has developed a programme for improving the didactic abilities and teaching methods. According to the Self-Assessment Report, the Teacher Development Center was established in 2015 as an independent structure to support the continuous development of teaching methods, research, and professional activities for teachers. In 2020, the Teacher Development Center expanded into an e-learning centre. With the implementation of the Teacher Development Programme in 2021, new teachers are provided with training on teaching methods, medical education research, e-learning methodology, problem-based learning, and research methodology.

In addition, scholarships are available especially for young staff members. In this way, they get the opportunity to attend programmes at foreign universities in order to improve their competences in the area of teaching methods, as well as syllabus and course content development. As a result, faculty members are sent to Japan, USA and Europe for further medical education, scholarships for these activities are provided by the government.

The peers discuss with the members of the teaching staff the opportunities to develop their personal skills and learn that the teachers are satisfied with the internal qualification programme at MNUMS. The only weak point the peers observe is the teachers' English proficiency. In order to further promote the internationalisation of MNUMS and the School of medicine, possibly all teachers should be fluent in English and be able to teach classes in English. This is particularly important in view of the fact that there is an English class in the Undergraduate Programme for Medical Doctor.

Overall, the peer group confirms that MNUMS offers sufficient support mechanisms and opportunities for members of the teaching staff who wish to further developing their professional and teaching skills. They emphasise the comprehensive further education and training opportunities and the exemplary focus on medical teaching as particularly positive.

The teachers consider the education of students to be one of their most important tasks and spend a corresponding amount of time and effort on it.

Final assessment of the peers after the comment of the Higher Education Institution regarding criterion 5:

The peers appreciate that MNUMS is offering several opportunities for the teachers to improve their English proficiency (Journal Club, English language classes, and an IELTS test preparation course). MNUMS should further pursue this path and encourage the teachers to further improving their English proficiency.

The peers are glad to read that MNUMS has the goal of increasing the proportion of teachers with doctorate degrees up to 60 percent in 2025 and 70 percent in 2030. Currently, 56% of the teachers who are involved with the Undergraduate Programme for Medical Doctor hold a PhD degree.

The peers consider criterion 5 to be mostly fulfilled.

6. Educational Resources

Criterion 6.1 Physical facilities

Evidence:

- Self-Assessment Report
- Study plan
- Module descriptions
- Discussions during the audit

Preliminary assessment and analysis of the peers:

MNUMS was established in 1942 and is located at the centre of Ulaanbaatar. The main building consists of four floors with 17,140 square meters. The Central Library of MNUMS has seven floors within a total area of 1,828.81 square meters. There has been a steady increase of classrooms and laboratories equipment for medical training since 2017. The School of Medicine opened a new 6-story complex with 7 new lecture halls, 20 practice rooms, 10 skills rooms, and 3 new laboratories in 2019. As a result, the amount of space available per student has increased, and the learning environment has improved.

The new Mongolia-Japan Hospital was officially opened in 2019. It was renamed the Mongolia-Japan Training Hospital of the Mongolian National University of Medical Sciences

(MNUMS) in March 2020. This hospital has 90 inpatient beds and can accommodate an average of 8,000 patients a year in seven departments in medical specialties (internal medicine, neurology, surgery, gynaecology, paediatrics, traditional medicine, and rehabilitation). It can provide medical assistance and services to an average of 600 patients a day, 150,000 patients a year, through the ambulatory and the specialized 37 examination rooms, rehab centre, wellness centre, diagnostic ward with high capacity equipment, endoscope ward, and clinical laboratories. In addition, there is the Central Hospital, which can accommodate an average of 150 patients a day, or 14000 patients a year. The Central Hospital has also a lecture hall and classrooms for students. Moreover, there is the Central Hospital of Mongolian Traditional Medicine, which offers medical treatment in traditional medicine such as acupuncture and yoga. Finally, the Central Dental Hospital offering clinical services such as oral surgery, preventive dental care for paediatrics, denture and orthodontic treatment, dental hygiene, endodontic treatment, maxillofacial surgery, and diagnostic tests.

For further promoting medical research and services, the Clinical Molecular Diagnostic Center of MNUMS (CMDC) was established in 2021, with the support from the Mongolian Government. In the CMDC, also COVID-19 PCR tests (PCR test in saliva and nasopharyngeal swabs, mutation testing, emergency and mobile tests, rapid diagnostic tests) are conducted. CMDC provides doctors and teachers with the opportunity to conduct research activities with the goal of advancing their career by contributing new insights in medical sciences.

During the audit, the auditors see videos and live presentations of the laboratories and the new Mongolia-Japan Hospital and the University Hospital in order to assess the quality of the infrastructure and technical equipment. The peers confirm that the facilities are sufficient for offering the Undergraduate Programme for Medical Doctor and that enough resources are available. Especially the new Mongolia-Japan Hospital is well equipped for teaching students and treating patients. With respect to the anatomy laboratories, the peers notice that they have been updated since the last visit in 2016 and are sufficiently equipped now. However, it would be useful to give students also the opportunity to learn gross anatomy with plastic body and organ models in addition to skeletons and skulls.

Criterion 6.2 Clinical training resources

Evidence:

- Self-Assessment Report
- Study plans

- Module descriptions
- Discussions during the audit

Preliminary assessment and analysis of the peers:

Students receive clinical training from the second semester of the Undergraduate Programme for Medical Doctor. Among the imparted competencies are anamnesis skills on different cases (such as dyspnoea, infection, pregnancy, etc.), basic physical examination (such as vital signs, spine, thorax, abdomen, ENT, etc.) and invasive procedures (such as injection, intra venous-line, urethral catheter, nasogastric tube, circumcision, etc.). In clinical skills courses, students are given lectures and demonstrations by experts, followed by practical sessions, where students are divided into small groups, each supervised by an instructor. Students take turns on taking the role as a doctor or as a patient. Each group is provided with mannequin and medical equipment according to each topic. There are hospital visit sessions to observe clinical practice at the hospital with real patients.

During the last year of studies, students will receive clinical training at the teaching hospitals. Every student will follow a clinical rotation, where they will learn to handle cases with real patients under guidance and supervision of expert lecturers.

The second floor of the new building of the School of Medicine offers nine clinical training rooms (Internal Medicine, Emergency Medicine, Obstetrics and Gynaecology, Paediatrics, Ophthalmology, Surgery, Otorhinolaryngology, Neurology, and Haematology), which are used for daily training activities to improve students' clinical skills.

Each department of the School of Medicine is in charge of instrumentation resources and medical equipment for the clinical training rooms. All academic staff conduct training here according to the approved schedule and they submit the orders for the necessary equipment for the clinical training rooms to the financial department.

In general, there are sufficient clinical training resources available for adequately teaching the students.

Criterion 6.3 Information technology

Evidence:

- Self-Assessment Report
- Discussions during the audit

Preliminary assessment and analysis of the peers:

MNUMS offers an internal database for education, research, and hospital work (eMNUMS). This computer network allows the management of intranet and internet access through the campus. There is also Wi-Fi access throughout the buildings. This should support the use of information and communications technology in the learning and teaching process at MNUMS.

For academic staff members and students, the MNUMS central library provides access to scientific database (Research4life, Springer Link). This service can also be accessed via WiFi-hotspots and offers access to electronic journals collections, data-based information, and various international e-books.

Course descriptions are available to students and teaching staff via an online platform, which is run by the MNUMS E-learning Center. The eMNUMS application allows students to study in an online format by connecting their mobile devices to the MNUMS e-learning system, which has been fully implemented in 2018.

As a result of the COVID-19 pandemic, MNUMS has moved completely to online schooling during the academic year 2020/21 and staff members used the E-learning systems such as G-Suite and Zoom for conducting the courses. Supplementing online lectures for students, staff members are also offering online lectures regarding health education that are open to all citizens and especially health care workers. Currently, MNUMS uses an open source Moodle 3.11 system in its e-learning system, updates the software every year, and implements additional developments according to the needs of the different degree programmes.

Finally, there are computer facilities (10 computer labs with at least 15 computers) for students available at MNUMS, all computers are connected to a fast speed internet which offers access to the e-learning management system, the library information system, email server, content management system and the hospital information system.

Criterion 6.4 Medical research and scholarship

Evidence:

- Self-Assessment Report
- Study plan
- Module descriptions
- Discussions during the audit

Preliminary assessment and analysis of the peers:

Research and promoting students' independent scientific work is part of the learning process and is incorporated into the curriculum of the Undergraduate Programme for Medical Doctor.

The Public Health School works to support student research in epidemiology and biostatistics. Epidemiology is the study of common health problems in the population, the prevalence and causes of communicable and non-communicable diseases, the acquisition of epidemiological research methods, the organization and assessment of communicable disease control and surveillance, and the study of health-related infections. For example, students are introduced to research activities in the third year during the course "Epidemiology" and in the fourth year in the course "Biostatistics". In "Epidemiology", students should acquire skills to discern threatening health conditions, reasons for the spreading of infectious and non-infectious diseases, learn about the ways of epidemiology research, and collect information. The "Biostatistics" course has the goal to provide students with the competences to identify the prevalence of health phenomena, the factors, and causes that affect them. In addition, students should learn how to use them in clinical practice to assess the quality and effectiveness of health care, plan, make decisions, and formulate policies.

After the last audit, MNUMS has shifted to a curriculum that incorporates research and project planning techniques in several courses. Students learn in the different blocks about teamwork, project planning, reporting skills, gathering relevant evidence, preparing presentations and discussions, studying independently, and working in teams. In addition, students can choose the elective course "Research Methodology", which supports students who want to write research projects.

Lecturers conduct their research activities usually by involving students. Research funding is available from MNUMS, the Mongolian government, and private, national, and international institutions. Lecturers also work in international research groups and some have cooperations with private companies or research institutions in health-related projects. The research results are presented in seminars, published in books, and national and international journals.

There are four institutes to support the research activities at MNUMS: Institute of Medical Sciences, Institute of Biomedical Sciences, Institute of Public Health, and Clinical Molecular Diagnostic Center.

The Clinical Molecular Diagnostic Center (CMDC) was established to act as a reference laboratory that is dedicated to providing physicians with comprehensive and accurate mo-

lecular testing. CMDC conducts a wide range of DNA and RNA based tests for various infectious diseases, inherited genetic diseases, and malignancies. CMDC also provides testing and diagnostic devices to support the teachers' research activities.

Medical research activity at MNUMS includes a total of 84 projects plus several additional funded activities. The number of Scopus cited papers has increased from 42 in 2017 to 84 in 2021. This indicates that medical research plays an ever more important role.

Criterion 6.5 Educational expertise

Evidence:

- Self-Assessment Report
- Discussions during the audit

Preliminary assessment and analysis of the peers:

The auditors confirm that students are generally satisfied with the teachers' expertise, delivery and support. This is verified through the course evaluations.

MNUMS recognises that not only academic performance is important for becoming a successful medical practitioner but also soft skills and behaviour skills (communication skills, teamwork, etc.) need to be imparted. MNUMS tries to cover these areas by addressing them in courses like "Human Development" and "Fundamentals of Philosophy".

The Teacher Development and e-Learning Division at MNUMS has been established in 2021. The division has 32 coordinators and specialists and, for example, supports teachers in writing research papers in the field of medical education. Moreover, MNUMS has started to provide incentives and scholarships to teachers, and a collective agreement has been signed with the Trade Union Committee to evaluate the results.

In addition, the Faculty of Medicine encourages their students to pursue extracurricular activities and develop critical thinking. The peers are satisfied with the existing opportunities.

Criterion 6.6 Educational exchanges

Evidence:

- Self-Assessment Report
- Discussions during the audit

Preliminary assessment and analysis of the peers:

The School of Medicine encourages its students to participate in international exchange programmes and to spend some time during their studies abroad. Currently, MNUMS collaborates with 124 universities from more than 22 countries. Within this framework, MNUMS is supporting activities that enable exchanges of teachers and students in the context of conferences, seminars, and summer courses. Furthermore, MNUMS is working towards establishing a university hospital system that will bring Mongolia's medical education up to the level of medical advancement in developed countries around the world. For example, MNUMS has established a cooperation with Georgia State University (USA). Since 2021, five medical students who completed first- or second-year of academic studies at Georgia State University have started the third year in Undergraduate Programme for Medical Doctor. In addition, the number of international undergraduate students studying at MNUMS is expected to increase from year to year

The School of Medicine cooperates with other educational institutions to promote international teacher and student exchanges. From 2017 to 2021, a total of 100 students from 14 different countries transferred to the School of Medicine. Currently 44 students from MNUMS are studying abroad (27 in Laos, 7 in South Korea, and 10 in China). They receive scholarships from the Government of Mongolia. In the school year of 2020, 13 foreign students have successfully graduated from MNUMS. As of January 10, 2022 out of the 138 foreign students currently studying in MNUMS, there are 41 international students in the Undergraduate Programme for Medical Doctor (11 from South Korea, 1 student from China, and 29 from Laos). The peers see that the School of Medicine is trying to increase the number of international students and offering an English class is an important contribution to further internationalising the programme. In this respect, the peers think that it would be useful to offer extracurricular Mongolian language classes to the international students so they can interact directly with the patients. Moreover, the peers learn during the audit that so far, no Mongolian students were sent to Georgia State University. MNUMS should increase its efforts to send more Mongolian students abroad and to establish more cooperations for medical students. For example, European organisation as the German Academic Exchange Council (DAAD) offer financial support for international students that want to study in Germany. Furthermore, there are opportunities to participate in student research and professional exchanges, such as the multilateral student-led exchange programs of the International Federation of Medical Students Associations (IFMSA).

Academic staff members can attend workshops and conferences abroad or can conduct their research activities at international universities. As part of the teacher exchange program, MNUMS cooperates with the World Medical Education Association, the Asian Medi-

cal Education Association, the Medical Health Association, and the Asian Public Health Association to train teachers abroad. For example, in 2021, 147 teachers of MNUMS completed long and short-term online training in 116 foreign countries.

In summary, the peers confirm that opportunities for international educational exchange for students exist and students are well informed about the offers. Nevertheless, the academic mobility of the medicals students is low and the peers recommend establishing more international cooperations and encouraging and better supporting medical students to spend some part of their medical education abroad.

Finally, the peers point out that a regulation on the recognition of credits acquired abroad should be established; a good example is the Lisbon-Convention on the Recognition of Qualifications concerning Higher Education in the European Region, which was signed for this purpose.

Final assessment of the peers after the comment of the Higher Education Institution regarding criterion 6:

The peers confirm that MNUMS has a regulation how credits for summer internships, which have been conducted outside MNUMS, can be transferred. However, the peers point out that this regulation is much too specific and only covers the summer internship programme. They emphasise that MNUMS has to draft a general guideline for recognising credits achieved outside MNUMS that is aligned with the Lisbon convention.

The peers consider criterion 6 to be mostly fulfilled.

7. Programme Evaluation

Criterion 7.1 Mechanisms for programme monitoring and evaluation

Evidence:

- Self-Assessment Report
- Discussions during the audit

Preliminary assessment and analysis of the peers:

The peers discuss the quality management system at MNUMS with the programme coordinators. They learn that there is a continuous process to improve the quality of the Undergraduate Programme for Medical Doctor. It is carried out through internal and external evaluation. Internal quality assurance it is carried out through various mechanisms, such as

the assessment of the learning process by lecturers and regular internal evaluations from all stakeholders, including students. The evaluation of the programme is also conducted by monitoring various parameters, such as the students GPA, duration of study, students' satisfaction and drop-out rates.

MNUMS has established the Quality Assurance Office, which is responsible for conducting and implementing a university-wide quality management system and monitor its results. It supports the development of quality culture in which all internal stakeholders assume responsibility for quality and engage in quality assurance at all levels of MNUMS.

In addition, there is the Curriculum Committee, which is responsible for the internal quality assurance of the degree programme. This includes assessing deficits and implementing changes and improvements where necessary. The members of the Curriculum Committee are appointed by the President of the University based on the recommendations of the MNUMS Academic Council.

External quality assessment of the degree programme is provided by the accreditation of the degree programme by the National Council for Higher Education Accreditation of Mongolia. In addition, the Undergraduate Programme for Medical Doctor has been evaluated by the Association for Medical Education in the Western Pacific Region (AMEWPR) in 2012.

Finally, in 2015 experts from the Institute for Education, University of the Groningen (Netherlands) and Werklund School of Education, University of Calgary (Canada) evaluated the Undergraduate Programme for Medical Doctor.

Criterion 7.2 Teacher and student feedback

Evidence:

- Self-Assessment Report
- Discussions during the audit

Preliminary assessment and analysis of the peers:

Internal evaluation of the quality of the degree programmes is mainly provided through student and teacher surveys. Students and teachers give their feedback on the courses by filling out the questionnaire online.

Students provide feedback through questionnaires that are filled out online every semester for each course. The head of the degree programme compiles the results of the questionnaires and gives feedback to the faculty involved. The course questionnaires aim at continuously improving the degree programme and at creating a supportive and effective learning environment for students. In addition, graduating students and alumni are asked to fill

out online questionnaires concerning their academic experience in the degree programme and their preparation in the medical sciences to successfully achieving their career goals. The analysis of the questionnaires is done by the School of Medicine and forwarded to the entire faculty for continuous improvement of the degree programme.

The auditors gain the impression that the students' feedback is taken into account by the programme coordinators and changes are made if there is negative feedback. They confirm that the School of Medicine regularly monitors and reviews the degree programme and the block courses to ensure that they achieve the objectives set for them and respond to the needs of the students.

Criterion 7.3 Performance of students and graduates

Evidence:

- Self-Assessment Report
- Discussions during the audit

Preliminary assessment and analysis of the peers:

The School of Medicine regularly monitors and analyses the students' performance with respect to examination scores and the achievement of the intended learning outcomes. The analysis is used for student selection, planning of the degree programme, and consultation for students.

According to the Self-assessment Report, the average GPA of graduates from 2018 to 2020 was quite high at approximately 3.25. From 2017 to 2020, around 95 % of the students successfully completed the Undergraduate programme for Medical Doctor.

With respect to job perspectives, in 2019, the employment rate was 78.7 % within one year after graduation. In 2014, it was only 69 %, since then, the employment rate has continually increased. In 2019, 12.1 percent of all graduates started jobs immediately, 32 % in 3-6 months, and 78.7 % in 6 - 12 months.

In general, the employers confirm during the discussion with the peers, that they are very satisfied with the qualification profile of the graduates. However, they point out that it would be very useful for the medical students to get more hands-on experience with patients during the clerkships.

Criterion 7.4 Involvement of stakeholders

Evidence:

- Self-Assessment Report
- Discussions during the audit

Preliminary assessment and analysis of the peers:

Monitoring and evaluation activities in the Undergraduate Programme for Medical Doctor involve lecturers, students, alumni, and employers. Feedback is given by filling out questionnaires, both online and offline. The external stakeholders of the Undergraduate Programme for Medical Doctor are regularly consulted via tracer studies. In the course of these studies, alumni and the employers gave some valuable input regarding the curriculum. The satisfaction of the external stakeholders is usually high and the comments are used for improving the degree programmes.

MNUMS works closely with its Alumni Association. After the MNUMS Alumni Association was registered and certified by the Ministry of Justice in 1998, it was fully authorized to operate with the aim of assisting in bringing together alumni from all generations, sharing professional experiences, and helping to further improving the degree programmes at MNUMS. The association has branches in 21 provinces of Mongolia and serves as a bridge between the alumni and MNUMS to communicate suggestions to the university. Moreover, it organizes an annual conference to share life experiences and career opportunities. The “Altangagnuur” annual conference held by the Alumni Association engages alumni from all graduation years, awards honorary titles, organises meetings and competitions, and publishes “Altangagnuur” book, the graduate yearbook. Every year, the Alumni Association conducts knowledge and skills development trainings for MNUMS graduates.

In summary, the peer group confirms that the quality management system is suitable to identify weaknesses and to improve the degree programmes. All stakeholders are involved in the process.

Final assessment of the peers after the comment of the Higher Education Institution regarding criterion 7:

The peers thank MNUMS for clarifying that “the dean of respective schools and branch schools shall be appointed as a chairman of the Curriculum Subcommittee, a specialist in charge of training as a Secretary, and heads of departments, senior lecturers, lecturers, and the student representatives as members.” As students’ representatives are already members of the Curriculum Subcommittee, the peers are satisfied to this respect.

The peers consider criterion 7 to be fulfilled.

8. Governance and Administration

Criterion 8.1 Governance

Evidence:

- Self-Assessment Report
- Discussions during the audit

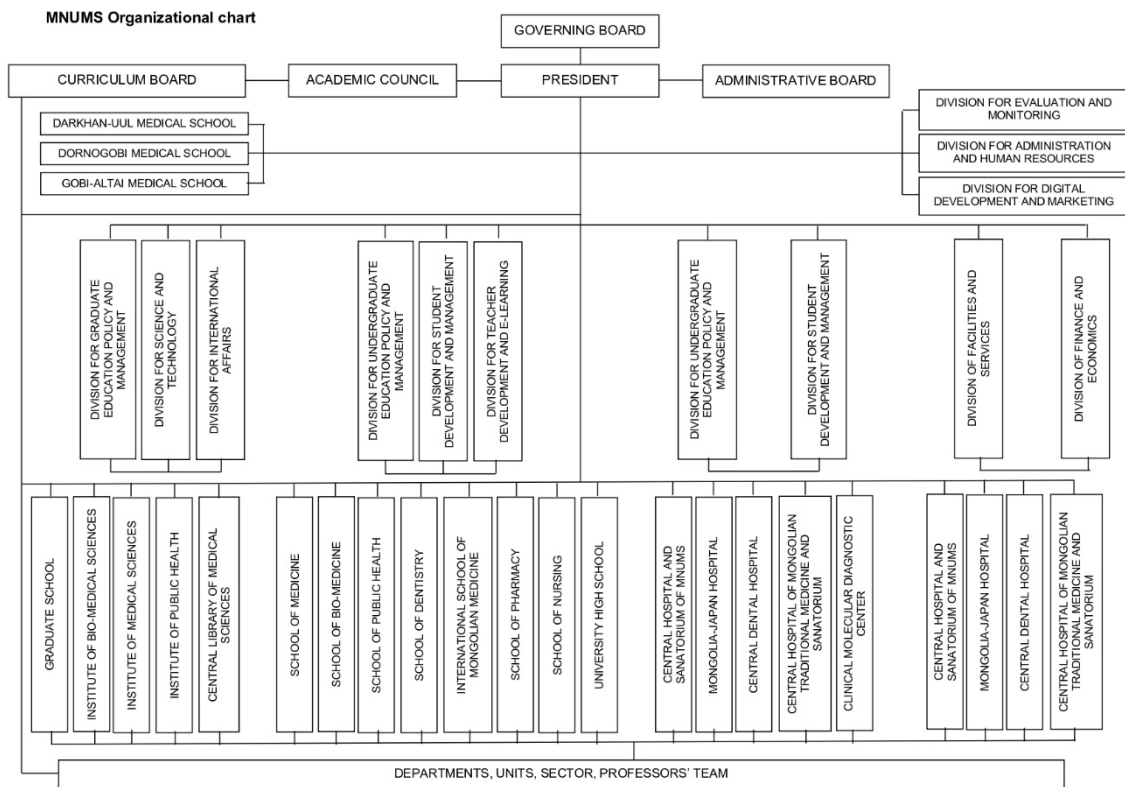
Preliminary assessment and analysis of the peers:

As described in the Self-Assessment Report the governance of MNUMS refers to the standard structure as determined by the University's management. The highest decision making panels at MNUMS are the Administration Board, which manages the day-to-day activities of MNUMS, the Academic Council, which is responsible for the academic activities of MNUMS, and the Governing Board (Steering Committee), which consists of different persons from the Mongolian government, lecturers, students, and staff of MNUMS. The Governing Board is headed by the Secretary of State of the Ministry of Health, Mongolia.

The School of Medicine is managed by the Dean, the Department Heads, and the Academic Council. Implementation of the Undergraduate Programme for Medical Doctor is carried out in collaboration with the Deans of the School of Biomedicine and the School of Public Health. Meetings among the Deans are held every two weeks to review and discuss the issues of each department as well as research and clinical activities.

The general organisation structure of MNUMS is shown in the following diagram:

C Analysis and Findings of Peers



Source: MNUMS

The peers confirm that the School of Medicine has a well-defined structure of governance, which includes representatives from all stakeholders.

Criterion 8.2 Academic leadership

Evidence:

- Self-Assessment Report
- Discussions during the audit

Preliminary assessment and analysis of the peers:

The School of Medicine (SoM) is managed by the Administrative Board, the Academic Council, and the Dean. The Dean of the School of Medicine manages the implementation of the Undergraduate Programme for Medical Doctor with the support of the administrative staff, which includes the Head of the Departments, the Academic Council, the Curriculum Committee, and the Block Coordinators. The School of Medicine has 23 departments and implementation Undergraduate Programme for Medical Doctor is carried out in collaboration with the Deans of the School of Biomedicine and the School of Public Health. Meetings

among the Department Heads of the School of Medicine are held every two weeks to review and discuss issues with respect to training, scientific research, and clinical activities in each department.

On programme level, the Curriculum Committee is in charge of internal quality assurance and is responsible for the evaluation of new developments, the identification of problems, and decision-making related to policy recommendations and their implementation.

Criterion 8.3 Educational budget and resource allocation

Evidence:

- Self-Assessment Report
- Discussions during the audit

Preliminary assessment and analysis of the peers:

The Undergraduate Programme for Medical Doctor is fully supported by MNUMS and the School of Medicine. MNUMS is a state-owned enterprise that operates on a self-financing basis. From January 1, 2019, the government stopped directly funding MNUMS. In addition, MNUMS regularly receives grants from foreign countries (e.g. Austria) to update the technical infrastructure and to purchase modern medical devices.

Compared to 2017, the financial income of MNUMS has been increasing due to structural changes in 2021. To demonstrate, the total income of MNUMS increased from 32.310.053500 MNT (9.867.833 €) in 2017 to 39.592.869.210 MNT (12.092.082 €) in 2021. The budget revenue has increased because MNUMS has started to operate its own Central Hospital, the Clinical Molecular Diagnostic Center, the Central Hospital of Mongolian Traditional Medicine, and the Central Dental Hospital of School of Dentistry. This led to an increase in income from health care services. In addition, the tuition fees have been gradually increased and MNUMS participates in projects with private companies to supplement its revenues.

All revenues are centralized at the university and then distributed to the schools and departments according to their financial needs. Each Department and each School presents an annual budget plan so that the MNUMS Division for Finance and Economics can design a budget for the whole university.

Criterion 8.4 Administrative staff and management

Evidence:

- Self-Assessment Report
- Discussions during the audit

Preliminary assessment and analysis of the peers:

Non-academic staff at the School of Medicine consist of administration staff (10), librarians (19), technicians (7), and associate workers (3). The Faculty of Medicine usually directly recruits administrative and supporting staff members.

The peers consider the number and qualification of the administrative staff members at the School of Medicine to be sufficient for adequately running the Undergraduate Programme for Medical Doctor.

Criterion 8.5 Interaction with health sector

Evidence:

- Self-Assessment Report
- Discussions during the audit

Preliminary assessment and analysis of the peers:

The peers confirm that the School of Medicine has a strong working relationship with the health sector in Mongolia. The cooperation exists mainly in the fields of education, research, and medical services.

This includes both public and private health care organisations such as the First Central Hospital of Mongolia, the Third Central Hospital named after Shastin, NCCD /National Center for Communicable Diseases, the National Center for Maternal and Child Health, the First Maternity Hospital of State Clinic, the General Hospital for State Special Servants, the National Trauma and Orthopaedic Trauma Center, the National Dermatology Center, the National Cancer Center, the Central Military Hospital, the Ear Nose and Throat "EMJJ" hospital, and the Bolor-Melmii Eye hospital. In addition, MNUMS cooperates with 21 provincial hospitals, 18 district health centers, and the family health centers of Ulaanbaatar. The cooperation agreements with those health organisations are renewed every two years

Final assessment of the peers after the comment of the Higher Education Institution regarding criterion 8:

MNUMS does not comment on this criterion in its statement.

The peers consider criterion 8 to be fulfilled.

9. Continuous Renewal

Evidence:

- Self-Assessment Report
- Study plan
- Module descriptions
- Discussions during the audit

Preliminary assessment and analysis of the peers:

As described in the previous chapters, continuous renewal of the Undergraduate Programme for Medical Doctor is an essential part of quality assurance system at MNUMS and the School of Medicine.

For example, there is a continuous process at MNUMS in order to improve the quality of the degree programmes, which is carried out through internal and external evaluation. Internal evaluation of the quality of the degree programmes is mostly provided through students' feedback and quality audits. In addition, alumni and employers' surveys are conducted. The peers appreciate that the School of Medicine stays in close contact with its alumni and uses their expertise and feedback for further developing the degree programmes.

Moreover, MNUMS collects data about applications, enrolment and academic results. These indicators are used to analyse the programme's success and if deficits are found, they are addressed.

As an overall judgement, the peers generally find that continuous monitoring and renewal is indeed taking place and that most of the quality assurance loops are closed. Furthermore, the peer group confirms that the quality management system is suitable to identify weaknesses and to improve the degree programmes. The stakeholders are involved in the process.

Final assessment of the peers after the comment of the Higher Education Institution regarding criterion 9:

MNUMS does not comment on this criterion in its statement.

The peers consider criterion 9 to be fulfilled.

D Additional ASIIN Criteria

Criterion D 1.2 Name of the degree programme

Evidence:

- Self-Assessment Report
- Study plan
- Discussions during the audit

Preliminary assessment and analysis of the peers:

The peers confirm that the original Mongolian name as well as the English translation of the Undergraduate Programme for Medical Doctor corresponds well with the intended objectives and learning outcomes.

The titles awarded to graduates of the medical programme are Bachelor of Science and Medical Doctor (MD).

Criterion D 2.2 Work load and credits

Evidence:

- Self-Assessment Report
- Study plan
- Module descriptions
- Discussions during the audit

Preliminary assessment and analysis of the peers:

The degree programme awards 207 Mongolian credit units (CU) in 12 semesters, divided into basic medical courses, basic professional courses, and professional medical courses (63 credit units). Compared to the ECTS system, the total number of credit units gained in the entire degree program is equivalent to 331.2 ($207 \times 1.6 = 331.2$) ECTS points. In Mongolia, one credit unit corresponds to 48 hours of workload. In detail, for every one hour of lecture the students have two hours of self-study, for every two hours of seminar or practical work the students have one hour of self-study per week. Under the assumption that one ECTS credit point equals 30 working hours this results in a conversion ratio of 1.6 between Mongolian credit units and ECTS credit points.

The total workload of the medical programme is $207 \times 48 = 9936$ hours.

D Additional ASIIN Criteria

This programme was established in 2016, when several changes were implemented, for instance, the total workload load was reduced by 240 hours and the number of credits was reduced by five and the former 21 blocks were reduced to six integrated blocks.

The students' total workload in the different courses and blocks is depicted in the following table:

Subjects	Number of subjects	Total hours		Class type				
		Credit	Hours	Lecture	Practice	Seminar	Self-study	
General basic								
Compulsory	27	55	2640	336	840	248	1216	
Elective courses	8/2	4	192	16	-	64	96	
Total		59	2832	368	840	312	1312	
Professional basic								
Compulsory	18	35	1680	246	454	174	806	
Elective courses	10/2	2	96	16	32	-	48	
Total		37	1776	262	486	174	854	
Professional								
Compulsory	Block	23	78	3744	530	1272	164	1778
	Clinical practice training	19	19	91	126	230	126	430
Elective	24/2	4	192	32	64	-	96	
Total		101	4848	688	1566	290	2304	
Introductory practice		2	96	-	64	-	32	
Clinical practice I		2	96	-	64	-	32	
Clinical practice II		3	144	-	96	-	48	
Clinical practice III		3	144	-	96	-	48	
Sub total		10	480	-	320	-	160	
Total		207	9936	1318	3212	776	4630	

Source: MNUMS Self-Assessment Report

During the discussions with the programme coordinators and the students, the peers learn that so far there has been no survey asking the students to evaluate the amount of time they spend outside the classroom for preparing the classes and studying for the exams. Since this is necessary in the ECTS framework, the peers suggest asking the students directly about their experiences. This could be done by including a respective question in the course evaluations. The peers point out that the School of Medicine should follow the ECTS users' guide, while determining the students' total workload. This is the time students typically need to complete all learning activities (such as lectures, seminars, projects, practical work, self-study and examinations).

The students confirm with the peers that the workload is high but manageable.

In summary, the peers expect the School of Medicine to verify the students' total workload and to adjust the awarded ECTS credits accordingly.

Criterion D 3 Exams: System, concept and organisation
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Evidence:

- Self-Assessment Report
- Study plan
- Module descriptions
- Exemplary final projects
- Discussions during the audit

Preliminary assessment and analysis of the peers:

Before the update of the programme in 2016, students' research project was part of Block 20, which was conducted in the 5th year of the 21-block training programme.

The programme coordinators decided that a single block with research activities would not allow students to acquire sufficient research skills. Therefore, the School of Medicine has shifted to a curriculum that incorporates research and project planning techniques in each block. In the different blocks, students learn about teamwork, project planning, and reporting skills, choosing topics, seeking and reading relevant theoretical knowledge, gathering relevant evidence, preparing presentations and discussions, studying independently, working in teams, improving their skills, participating in discussions of their own and others' projects.

As the peers learn during the audit, in the third year of the medical programme, students form groups to conduct research projects, which are integrated in the six blocks. It is compulsory for all student to join one of the research projects. The results are presented in the course of the annual Students Research Conference. Teachers from the respective departments are available to support and advise the students, but the projects are not necessarily aligned with the teachers' research projects.

The peers point out that the Undergraduate Programme for Medical Doctor lacks a graduation paper or a Bachelor's thesis. However, they consider a Bachelor's thesis an essential part of academic studies because it demonstrates the students' ability to conduct a research project and to summarise and present the results. This should include the formulation of a research hypothesis, the design of a research project, literature research, practical laboratory work, and a written report, including a discussion of the results in view of the

relevant corresponding literature. In addition, the Bachelor's thesis serves as an effective tool to measure the academic level of theoretical and practical competencies obtained by a soon-to-be graduate.

Further promoting research activities is one of the strategic goals of MNUMS, as mentioned in the Development Policy 2021-2030: "Goal 2: To become a leading national research university that creates a research environment and conditions that meet international standards". To achieve this goal, MNUMS and the School of Medicine should also better involve undergraduate students in the ongoing research projects and establish a compulsory bachelor's thesis.

Criterion D 5.1 Module descriptions

Evidence:

- Self-Assessment Report
- Webpage Ba Medicine: http://www.mnums.edu.mn/?page_id=26041
- Study plan
- Module descriptions
- Discussions during the audit

Preliminary assessment and analysis of the peers:

The peers see that the module descriptions include a lot of detailed information about the organisation of the courses. This information is certainly important for the students but module descriptions should be a concise summary of the course's structure and content. The documents submitted by MNUMS are more comparable to a syllabus. The peers expect MNUMS to design concise module descriptions that include the following information: person(s) responsible for each module, teaching methods, workload, Mongolian credit points, ECTS points, intended learning outcomes, module content, prerequisites, forms of assessment and details explaining how the final grade is calculated, and recommended literature.

Furthermore, the peers expect MNUMS to make the Mongolian as well as the English module descriptions available to all stakeholders, e.g. by publishing them on the programme's webpage.

Criterion D 5.2 Diploma and Diploma Supplement

Evidence:

- Self-Assessment Report
- Sample Diploma Supplement and Diploma

Preliminary assessment and analysis of the peers:

The peer group confirms that a Diploma Supplement and Diploma Certificate are issued to all graduates of the medical programme. The documents include all necessary information about the structure and content of degree programme. It also informs about the qualification gained, including the achieved learning outcomes and the level and status of the pursued and successfully completed studies. In addition, all courses are listed and statistical data with respect of the distribution of the final grade is included.

However, the peers notice that the provided sample Diploma Supplement still refers to the old structure and workload of the programme before the latest update in 2016. This should be corrected.

Final assessment of the peers after the comment of the Higher Education Institution regarding the additional ASIIN criteria:

The peers support the plan to give students the opportunity to write a final project. MNUMS intends to update the curriculum in order to include the research methodology course in the 3rd year instead of teaching it in the 4th year. However, the peers emphasise that it is necessary to introduce a compulsory final project (Bachelor's thesis) to the curriculum of the programme. The final project should introduce students to research activities and independent practical laboratory work. Students should also have the opportunity to conduct their research project outside the epidemiology course and the scope of the final projects should be larger than only 30 % of the epidemiology course. Best would be to introduce a new module, in which students just conduct the final project and which is independent from the epidemiology course.

The peers confirm that MNUMS has updated the module descriptions, which now include information about the person(s) responsible for each module, teaching methods, workload, Mongolian credit points, intended learning outcomes, module content, prerequisites, forms of assessment, details explaining how the final grade is calculated, and recommended literature. Nevertheless, it is also required to include information about the students' total workload (hours per semester) and the awarded ECTS points.

The peers consider the additional ASIIN criteria to be mostly fulfilled.

E Additional Documents

Before preparing their final assessment, the panel asks that the following missing or unclear information be provided together with the comment of the Higher Education Institution on the previous chapters of this report:

- none

F Comment of the Higher Education Institution (28.10.2022)

MNUMS provides the following statement:

To update MNUMS homepage and publish admission regulations, and all relevant documents and regulations concerning the Undergraduate Programme for Medical Doctor in English.

- Under Program heading, the MNUMS homepage now contains Undergraduate, Graduate and Postgraduate pages where 2+4 module description has been provided for each block of Undergraduate Programme for Medical Doctor.
- As for the Undergraduate section of Program hyperlink in the MNUMS homepage, a handbook for each block of Undergraduate Programme for Medical Doctor has been added.
- The page for the integrated curriculum model of the Undergraduate Programme for Medical Doctor has been added as well.
- In the Admission section of the MNUMS homepage, Student Admission and Enrollment Regulations, International Student Admission Regulation, and Regulations for Undergraduate Education have been placed.

2. To update module description and handbook of each block using uniform model and upload to the homepage.

- Handbooks for Block 1A, Block 1B, Block 2, Block 3, Block 4, Block 5, and Block 6 have been created and uploaded to the homepage /attached handbook folder/
- Clinical training handbook has been produced and published in the webpage.

3. To improve English proficiency of teachers of the Undergraduate Programme for Medical Doctor.

- Every fortnight, the departments of the School of Medicine conduct a Journal Club in English, which is led by William Evan (IEEA, Chicago, USA) and Mervia T (IEEA, Philippines), the experts working at the invitation of the MNUMS

from International Education Exchange Association, and who, at the same time, provide methodological advice to the teachers and work towards improving their professional English language skills.

- Since the academic year of 2021-2022, William Evan (Chicago, USA) and Mer-va T (Philippines), the International Education Exchange Association experts have been teaching English language classes for teachers and doctors of the School of Medicine /attached English class for teachers picture/.
- In the academic year of 2021-2022, the Department for Teacher Development and E-Learning organized a IELTS test preparation course within the framework of the "Teacher Development" program, and more than 60 teachers participated in and completed it /attached IELTS certificate/.

4. To increase the number or proportion of PhD holders in Medicine

- The MNUMS Development Policy approved by Order No. 06 of the MNUMS President on April 26, 2021 set up the goal of supporting teachers, researchers, and doctors and increasing the proportion of teachers with doctorate degrees up to 60 percent in 2025 and 70 percent in 2030.
- For the percentage of teachers with a PhD degree teaching for the Undergraduate Programme for Medical Doctor in each school, it is 54% in the School of Medicine, 58% School of Bio-Medicine, and 54% School of Public Health. All in all, 56% of the teachers who are implementing the Undergraduate Programme for Medical Doctor hold a PhD degree /Attached staff handbooks/
- According to the MNUMS Internal Labor Regulations, a teacher is granted a paid-leave of one month to defend his/her PhD degree, and PhD holders receive an additional amount equivalent to 15% of their basic salary /attached evidence/
- The MNUMS President Order No A/265, dated December 27, 2021 approved the procedure for awarding the MNUMS President Research Grant, and as specified in it, PhD students are entitled to receive 5 million MNT. Up to now, 13 researchers have been awarded the grant. In the year of 2022, a total of 27 researchers submitted their applications for the MNUMS President Research Grant /attached evidence/
- Currently, 43 teachers from the MNUMS are studying a PhD in countries such as Japan, Italy, and South Korea. International doctoral scholarship announcements are posted on the university's intranet and website, and schol-

arship winners are selected through open procedure. Agreement with teachers studying abroad is made so that their positions are kept until they complete their studies.

5. To improve the integration of blocks

Criterion 2. Curriculum – Continuous Renewal

Criterion 2.1. Curriculum model and instructional methods

Additional information

The new Curriculum implemented in 2016 aims to reduce duplication of course subject and content. Through the Curriculum, the content of scientific disciplines is taught starting from the first years through linear training, and over the years, the content of the course expands, the theoretical course is reduced, and the clinical course is increased. As shown in Figure 1, it is characterized by continuing the education of science-based knowledge until graduation.

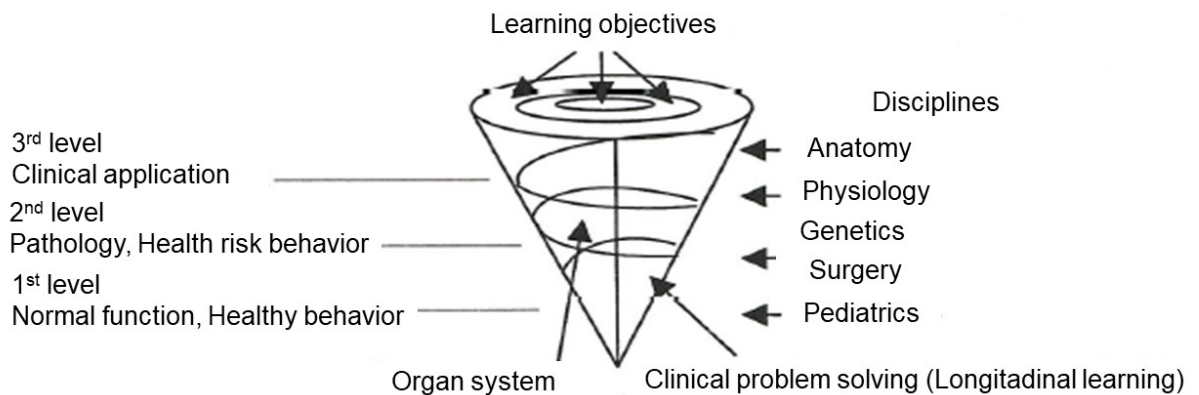


Figure 1.

Under the Undergraduate Programme for Medical Doctor, theoretical courses center around the body structure such as cells, tissues and organ system for the first 2 years, and for the remaining years, clinical courses comprised of subjects of field and professional integration are organized using didactic method that stimulates more active communication between teachers and students. The majority of training is organized in small groups, and

teachers from different fields are able to cooperate, train and learn from each other. Therefore, the programme allows students to learn theoretical knowledge combined with clinical skills in an integrated manner.

The basic medical education training of the programme is designed to equip students with the foundational knowledge of the human, human health, diseases, their social, biological and psychological factors, disease prevention, and structures and functions of living organisms at the molecular and cellular levels, as well as the knowledge of modern molecular biology analysis methods and the ability to integrate them with the knowledge acquired from other courses.

The student clinical skills center is facilitated with mannequins, mockups, demonstration materials, and training equipment so that students can gain experiences and skills by seeing patients and learning hands-on techniques and practices (basic professional skills, internal medicine diagnostics, etc.).

The examples of countries with highly developed medical education studies demonstrate that they mainly focus on topics and issues related to organ systems of the human body, their disorders, community health issues, and health promotion in addition to disease prevention. Theoretical and clinical departments jointly participate in training provided by blocks.

The importance of the SCORPIO training method lies in the fact that block training enables students to acquire a high level of theoretical and methodological knowledge that meets the requirements, give correct and optimal information in a short period of time, and based on that, learn the ability to perform actions, as well as provides the opportunity to evaluate whether the students have learned from the training. Part of the training is PBL training by which we are working to organize unit lessons in each field.

SECOND YEAR: Basic professional skills, radiology, laboratory, diagnosis of internal diseases, pharmacology, pathology, and pathophysiology are included in the second year. The curriculum for the second and third years of the pathophysiology course is attached as an example. Understanding the principles of pathophysiology is important for interpreting research results.

According to MNUMS President Order No A/19 dated January 28, 2021, in the "Regulations for undergraduate education", students of the basic course will graduate with the course they were first enrolled in, and the student has an opportunity to advance to the 3rd year based on the GPA and the integrated exam result. We would like to explain that the professional choice specified in the 2016 regulation is not implemented now.

As shown in Figure 2, our program is Z-shaped, and in the past, we have successfully implemented Block 21 as Z-shaped. Basic training begins with clinical courses including disease diagnosis, laboratory, imaging, basic professional skills, and pharmacology, all of which begin at the general content level.

In block training, block 1A includes courses such as pathophysiology, pathology, immunology, microbiology, molecular biology, etc. And molecular biology and microbiology courses are included in each block with specific content for each organism in that field.

The pharmacology course starts with general content such as writing prescriptions in the basic course, then in each block, the pharmacology of each specific area is covered in more detailed and advanced form, and in the 6th year, clinical pharmacology or the interaction of drugs is introduced.

As shown in Table 1, it is explained how the content of the organ system is carried out through vertical integration, and it shows that basic training and clinical training are taught together.

Previously, the content of pediatric was taught in each organ system separately in the 21th block program; we observed that the knowledge, skills, and attitude of graduates about pediatrics were not integrated. The currently implemented block program is able to provide an integrated understanding of pediatrics as a single block of pediatrics. That means, we do not separate adults and children by their organ systems for diagnosis, treatment, and medical care, and we create an opportunity to look at children holistically based on their internal syndromes. The university website is being renewed currently.

We hope that the training on English-language of the program will be reflected in the improvement, advance, and progress of the results in the accreditation process.

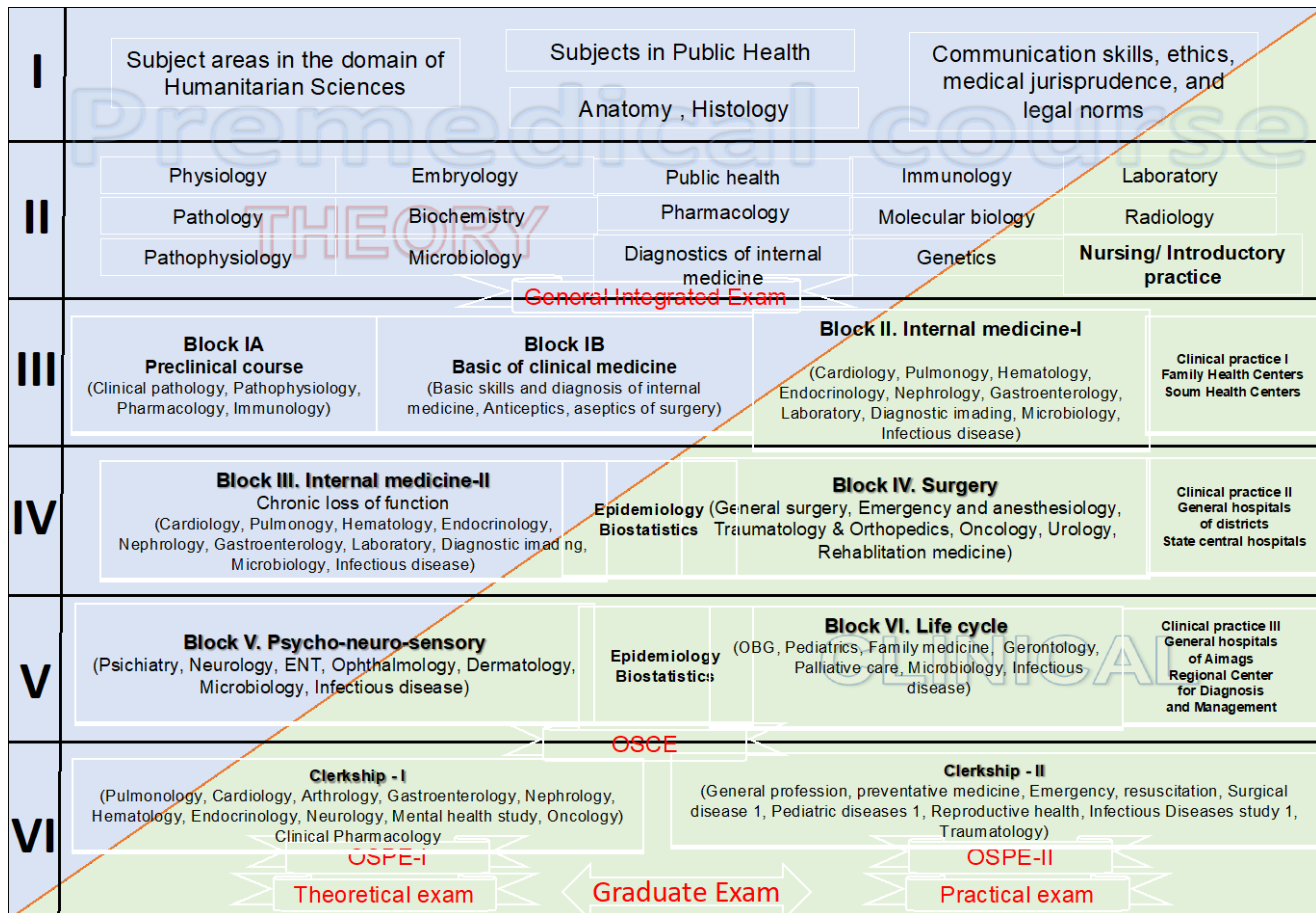


Figure 2

Table 1

Topic	Teaching method	Course	Department	Educational strategy	Explanation
The structure and functions of	Basic training	1	Department of Anatomy Department of Histology	Blended learning / online and	Lessons are taught at the general content area

<p>the human body system</p>		<p>2</p>	<p>Department of Physiology</p> <p>Department of Biochemistry</p> <p>Department of Biology</p> <p>Department of Microbiology, Infection Prevention and Control</p> <p>Department of Pathology, Forensic Medicine</p> <p>Department of Molecular Biology and Genetics</p> <p>Department of Immunology</p> <p>Department of Pathological Physiology</p>	<p>classroom training/</p>	
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	<p>Block training</p>	<p>3-5</p>	<p>The departments on the integrated program implementing, School of Medicine</p> <p>Department of Molecular Biology and Genetics</p> <p>Department of Immunology</p> <p>Department of Biochemistry</p> <p>Department of Anatomy</p> <p>Department of Physiology</p> <p>Department of Pathological Physiology</p> <p>Department of Pathology, Forensic Medicine</p>	<p>Blended learning / online, classroom and simulated training/</p>	<p><i>It is required to relearn the lecture related topic.</i></p> <p><i>(online lecture)</i></p> <p>Lessons are taught at specific content area.</p> <p>In that block, there are 5-8 departments linked by content area.</p>
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The diagnostics of the human body system	Basic training	2	Department of Clinical Laboratory Department of Radiology Departments of Internal Medicine	Blended learning / online and classroom training/	Lessons are taught at the general content area
	Block training	3-5	The departments on the integrated program implementing Department of Clinical Laboratories Department of Radiology and	Blended learning / online, classroom and simulated training/	Lessons are taught in specific content areas, especially more concentrated on manual skills.
	Clinical practice training	6	The professional department	Blended learning/simulated, ambulatory, units and job place training/	It provides the learners with knowledge, abilities, and attitudes, gain practice and development through competence.

The manual skills of the human body system	Basic training	2	Departments of Internal Medicine	Blended learning / online, classroom and simulated training/	Lessons are taught at the general content area
	Block training	3-5	The departments on the integrated program implementing	Blended learning / online, classroom and simulated training/	Lessons are taught in specific content areas, especially more concentrated on manual skills.
	Summer practice	2-5	Internship department	Blended learning/ simulated, ambulatory, units and job place training/	Under the scope of practice guidelines summer practice guidelines, a manual skills checklist is performed in a clinical setting.
	Clinical practice training	6	The professional department	Blended learning/ simulated, ambulatory, units and job place training/	It provides the learners with knowledge, abilities, and attitudes, gain practice and development through competence.

The pathology of the human body system	Block training	3-5	The departments on the integrated program implementing	Blended learning / online, classroom and simulated training/	Lessons are taught in specific content areas, especially more concentrated on manual skills.
	Clinical practice training	6	The professional department	Blended learning/simulated, ambulatory, units and job place training/	It provides the learners with knowledge, abilities, and attitudes, gain practice and development through competence.
The treatment of the human body system	Basic training	2	Department of Pharmacology	Blended learning / online and classroom training/	Lessons are taught at the general content area
	Block training	3-5	The departments on the integrated program implementing	Blended learning / online, classroom and simulated training/	Lessons are taught at specific content area. In that block, there are 5-8 departments linked by content area.

	Clinical practice training	6	All departments of School of Medicine Department of Pharmacology	Blended learning/simulated, ambulatory, units and job place training/	It provides the learners with knowledge, abilities, and attitudes, gain practice and development through competence.
The complex disease management of the human body system	Clinical practice training	6	All departments of School of Medicine Department of Pharmacology Department of Pathology, Forensic Medicine	Blended learning/simulated, ambulatory, units and job place training/	It provides the learners with knowledge, abilities, and attitudes, gain practice and development through competence.

CRITERIA 2.2 SCIENTIFIC METHOD AND APPROACH

There are two credit hours of epidemiology courses in the third-year professional basic course of the Medical Doctor Program. Students obtain the scientific knowledge of epidemiology, its research, the application of epidemiological methods in health research, an understanding of general knowledge, and the basic skills of reporting, presenting, and evaluating research results. The teaching formats are interactive lectures, working in small groups, and raising problems. In this course, students participate in student academic conferences on statistics, facts, data, and information.

There is an opportunity to require students to write a final project. We are pleased to inform you that we are updating our Curriculum to include the research methodology course in the Curriculum for the 3rd course instead of teaching it for the 4th course. In these ways the Curriculum update is currently under consideration by the Curriculum Committee.

CRITERIA 2.3 BASIC BIOMEDICAL SCIENCES

In the last semesters of the Medical Doctor Program, in addition to clinical and professional courses, students are offered to study the following fields such as social and behavioral

health sciences, medical ethics, traditional medicine, dentistry, and biomedicine through open electives courses in the curriculum.

Elective courses are taught in combination with the main curriculum. At a certain time, elective subjects are taught in a block. After learning the main subjects, the elective subjects are conducted in-depth. For instance: elective subjects can be selected for the 3rd, 4th, and 5th courses in the Medical Doctor Program. In your preliminary assessment, there was mention about the predominance of clinical courses in the final term. We understand that it witnesses learning is being conducted in the form of Z as one of the indicators.

CRITERIA 2.4. BEHAVIORAL AND SOCIAL SCIENCES AND MEDICAL ETHICS

There is no further explanation in this section.

CRITERIA 2.5 CLINICAL SCIENCE AND SKILLS

Between 2019 and 2022, during the pandemic, students could not practice for the internships. There is a linear training and hands-on clinical training, in the general organization of clinical training activities for students. In addition, strengthening the skills achieved through revision practice and practice time to improve patient-centered interactions in a hospital ward is increased more under the guidance of the teachers. Revision training time depends on the specifics of the subject and the teaching method reflected in the program.

When revision hours are included in the curriculum, they will be aimed at developing appropriate skills and providing knowledge that must be achieved in the subject and also credited to the student's grade and evaluation. In addition, a revision practice course was implemented in the curriculum related to the implementation of the basic medical curriculum.

The Curriculum Subcommittee is discussing the long-term study of clinical practice training nowadays. We are aiming to change clinical practice training into rotation and focusing on increasing the time of contact with patients, which was mentioned in the preliminary assessment of the criteria that you sent to us.

6. Ensuring the participation of all students in research work

In the course of epidemiology, each student conducts a survey/research. Teachers advise and support the student when students choose their research work topic. At the end of the lesson, the results of the research work will be presented within 7 minutes and it will be credited for 30% of the student's grade. As a result of this, the students will achieve how to conduct surveys/research, develop projects, make plans, develop survey questionnaires, as well as gain report writing and presentation skills. Students create a class team of 3-4 students and each team member has a role. A research work report should be written in 15-25 pages. Teachers provide guidance and generally give students tips. In the IV course, they benefit basic pro-

cessing the previously collected numerical data using a statistical processing program. In this way, students benefit from the opportunity to present their research at academic conferences efficiently.

The epidemiology course is related to other courses in the following ways.

1. To explore the facing problems of the disease through their own research and formulate the goals correctly
2. In cooperation with the teachers/lecturers of the internal medicine block, research shall be conducted.
3. As students conduct surveys/research and take questionnaires, their communication skills will be improved.
4. Compare the results of the research work with the results of other researchers
5. By presenting the speech in the group, theoretical knowledge and debating skills are improved. In addition, preparing a speech and presentation skills are improved.

7. Increase student participation in program subcommittees

It is included in clauses 2.5, 2.7, and 3.5 of the Regulations for Curriculum Committee Operations (attached evidence)

- Regulations for Curriculum Committee Operations, provisions 2.6., 2.7
- 2.5 The members of the Curriculum General Committee shall be the head of the Curriculum Subcommittee, the full-time lecturers of MNUMS, an officer in charge of academic affairs, and the student representatives.
- 2.7 The dean of respective schools and branch schools shall be appointed as a chairman of the Curriculum Subcommittee, a specialist in charge of training as a Secretary, and heads of departments, senior lecturers, lecturers, and the student representatives as members.
- 3.5 When necessary, an extended meeting shall be held with representatives of the employers and the alumni.

8. Structural detailed information on the Organizational chart of MNUMS

Governing Board of MNUMS has rules of operation and the following functions:

- Discussing and approving the rules, structure, organization, staffing, and salary standards of the university;
- Approving investment and annual budget schedules, controlling the cost;
- Discussing approving and changing development policies and strategic plans of the university;
- Approving tuition fees, student accommodation fees, service fees, and the number of students to be admitted in the current year
- Discussing the report of the director of the university, and giving evaluation and summarizing.

The Academic Council of MNUMS consists of representatives of leading scientists in the field and has the following responsibilities:

- Determining and approving the university's research and teaching policy;
- Discussing and evaluating research projects and program reports;
- Discussing and solving the issue of awarding academic titles and educational degrees to lecturers and researchers;

Administrative Board: An Administrative Board consists of representatives of the vice president, directors of the component schools, directors of branch schools, institutes, hospitals, heads of departments and divisions, and directors of affiliated organizations will work under the authority of the director of the university, which is responsible for providing advice, prompt management, and support on relevant issues.

9. Procedures for participating in the student exchange program and calculating credits

- MNUMS' students' quantitative data participating in the student exchange program (as of the last 5 years), /attached evidence/
- MNUMS' students' quantitative data and attachments of the student who presented at the student scientific conference /attached evidence, student scientific conference, abstract book 2019, 2021, 2022/
- In the Summer Internship Regulations, it is stated in Sections 2.9, 2.10, 2.11, and 2.12 of the Summer Internship Regulations regarding credit transferring if students participate in the International Student Exchange Program /attached evidence/

Explanations are given in the recommendation of ASIIN criteria

1. LEARNING RESOURCES

Criteria 6.2 (Learning resources)

In order to improve the clinical skills of 3rd, 4th, 5th and 6th-year medical students:

- Students receive and deliver patients, provide care and guidance to the inpatient wards, and reinforce practice under the supervision of lecturers and doctors in the client support department of the Mongolia Japan Hospital.
- 3rd-6th year students are on duty with lecturers and doctors in Mongolia Japan Hospital and training camp hospitals to strengthen the practice. During the duty period, at least 3 patients are examined and notes are taken related to the internship by each student and discussed in class.
- Students are involved in events organized by teachers and doctors at Mongolia Japan Hospital and base hospitals on celebration days (World Heart Day, Hypertension Day, World Anti-Arthritis Day, etc.). During those days, students perform activities such as checking the client's blood pressure, taking body measurements, taking questionnaires under the supervision of the teachers.

Criteria 6.4 Medical research and scholarship programs

- Elective courses were included in the curriculum in addition to the reports to familiarize the students with research work.
- Also, students read academic and research articles in each practice subject and present them through the student Journal club.

Criteria 7 Program evaluation

7.2. In the academic year 2019-2020, the academic quality of the graduates is 99.9% higher than in previous years, and the academic quality of the theoretical and practical exams of the graduates of previous years is 73.2% /3-year average/. It is concluded that due to the quarantine during the Covid-19 infection, we took one integrated exam online in an open-book format without distinguishing between theory and practice, which contributed to the high overall result of the exam.

7.3 In order to strengthen their theoretical knowledge and develop their clinical skills, "Medical Doctors" who study in their final sixth year in medicine spend 1-4

weeks at family health care centers, provincial and district hospitals, regional diagnostic and treatment centers, specialized national centers, and state central hospitals and perform clinical practice and a clerkship under the guidance and direction of contracted teachers-doctors in 19 specialties. The curriculum and the guidance of Clinical Practical Training include effective patient-contact time to act as an assistant physician and perform medical apprenticeship in the emergency department starting from receiving and welcoming patients, staying on duty overnight, seeing patients under the supervision of doctors and teachers, sending patients for necessary examinations, transporting blood products in case of emergency and delivering tissue analysis to the clinical laboratory during this period. For example, each student performing hematology rotations at the Clinical Practical Training must perform a patient examination list independently at the workplace under the supervision of a contracted teacher-doctor for 7 days or 5 working days for 8 hours, and 16 hours of night duty /total of 56 hours/ and the student's performance will be reviewed by a contracted teacher-physician. An example student-patient communication evaluation sheet of the hematology rotation at the Clinical Practical Training is attached below. Appendix

Appendix: A list of hands-on procedures during a hematology rotation

Numbers	Manual operations	Numbers to perform	Possession level	Point
1	Detect general symptoms of anemia	At least for 5 patients	1 2 3 4	1 point
2	Detect signs of congestion	At least for 5 patients	1 2 3 4	1 point
3	Palpate the spleen and describe its characterization	At least for 5 patients	1 2 3 4	1 point
4	Percuss the spleen and determine its size	At least for 5 patients	1 2 3 4	1 point
5	Palpate the lymph gland and describe its characterization	At least for 5 patients	1 2 3 4	1 point
6	Determine the blood type by the tray glass method using tsoliclone diagnoser	At least for 2 patients	1 2 3 4	2 point
7	Maintain blood product order forms, consent forms, and transfusion forms and learn to calculate doses	At least for 3 patients	1 2 3 4	1 point
8	Learn how to see biological compatibility	At least for 3 patients	1 2 3 4	2 point
9	Learn to store and transport blood products	At least for 2 patients	1 2 3 4	2 point
10	Write a medical history	At least for 5 patients	1 2 3 4	1 point
11	Look at the procedures for bone marrow cell and tissue analysis	At least for 5 patients	1 2 3 4	1 point
12	Send the patient's tissue samples to the clinical laboratory and summarize the test results	At least for 10 patients	1 2 3 4	2 point

13	Introduce the patients who are being treated with the contracted teacher-physician to the consultant doctor and other specialists	At least for 10 patients	1 2 3 4	2 point
14	Introduce and advise the patient and his family about the diseases and complications	At least for 10 patients	1 2 3 4	2 point
15	Plan treatment, follow-up treatment, follow-up examinations, and tests	At least for 10 patients	1 2 3 4	2 point
	Total			36 points

Criteria 9. Continuous renewal

In 2015 and 2017, experts from Groningen University, Netherlands conducted an external evaluation of the progress of the Bachelor's Degree program for Medicine. The quality assurance office was established by Decree A/15 of MNUMS President dated February 19, 2016. A quality management system that meets the requirements of the international standard ISO 9001:2008 has been introduced in order to build the effectiveness of the quality management system. The quality assurance office developed and defined the quality policy and on March 1 2016 the document defining the quality management system was officially approved. In the quality policy of MNUMS, it states that 'within the framework of the theory-based and research-based policy aimed at ensuring the sustainable development of MNUMS, we will offer quality products and services that meet the evolving needs of students by constantly improving the quality management system, relying on skilled teaching staff and students.

The quality assurance office conducts activities aimed at identifying weaknesses in the organization's operations and improving the curriculum. The quality assurance office also conducts a student satisfaction survey at the end of each academic semester, analyzes the results, and reports the results to the professional departments. The professional department discusses the results of the student's satisfaction in the departmental meeting and revises the content, teaching methods, and evaluation methods at a certain level.

In cooperation with component schools, program evaluation is carried out every 2-3 years. The curriculum is made in accordance with the needs of society, the health indicators of the population, its requirements, changes in educational technology, and the development of educational plans. Appropriate changes to the curriculum evaluation results are discussed by the curriculum sub-committee and the general curriculum committee, and will be reviewed by the dean of the school and the head of the Division for Undergraduate Education Policy and management, and approved by the Vice President for Academic Affairs.

This activity is regulated by rules and policies for learning technology and quality control. In accordance with the order A/199 of the MNUMS President dated 2021, a working group that was responsible for the evaluation of programme content was established and evaluated the undergraduate programme.

The Curriculum General Committee coordinates the meetings of the Medical Education and Programme Committee to discuss the content, level of coherence, continuity, differences, and curriculum design between postgraduate and graduate programmes.

As specified in the respective regulation, the Curriculum General Committee makes the curriculum of the MNUMS consistent with the education legislation of Mongolia, the integrated policy of the MNUMS, scientific development, and the needs of the labor market, ensures quality and standards of educational activities in line with international educational standards and makes proposals and decisions on teaching staff resources and capacities, textbooks, libraries, classroom availability, practical training materials, and educational laboratory supply and so on.

G Summary: Peer recommendations (12.11.2022)

Taking into account the additional information and the comments given by MNUMS, the peers summarize their analysis and **final assessment** for the award of the seals as follows:

Degree Programme	ASIIN seal	Subject-specific labels	Maximum duration of accreditation
Undergraduate Programme for Medical Doctor	With requirements for one year	--	30.09.2029

Requirements

- A 1. (WFME 6.6) Draft a guideline for recognising credits achieved outside MNUMS that is aligned with the Lisbon convention.
- A 2. (ASIIN 2.2) Verify the students' total workload and adjust the awarded ECTS points accordingly.
- A 3. (ASIIN 3) Introduce a compulsory final project (Bachelor's thesis) to the curriculum of the Bachelor's programme. The final project should introduce students to research activities and independent practical laboratory work.
- A 4. (ASIIN 5.1) The module descriptions need to include information about the students total workload (hours per semester) and the awarded ECTS points.

Recommendations

- E 1. (WFME 6.6) It is recommended to increase students' academic mobility by establishing more international cooperations and encouraging and better supporting medical students to spend some part of their medical education abroad.
- E 2. (WFME 5.2) It is recommended to further improve the teachers' English proficiency.
- E 3. (WFME 2.5) It is recommended to provide students with more hands-on experience with patients during the clerkships.
- E 4. (WFME 2.1) It is recommended to improve the integration of preclinical and clinical courses.

H Comment of the Technical Committee 14 - Medicine (02.12.2022)

Assessment and analysis for the award of the ASIIN seal:

The Technical Committee 14 – Medicine recommends the award of the seals as follows:

Degree Programme	ASIIN seal	Subject-specific labels	Maximum duration of accreditation
Undergraduate Programme for Medical Doctor	With requirements for one year	--	30.09.2029

Requirements

- A 1. (WFME 6.6) Draft a guideline for recognising credits achieved outside MNUMS that is aligned with the Lisbon convention.
- A 2. (ASIIN 2.2) Verify the students' total workload and adjust the awarded ECTS points accordingly.
- A 3. (ASIIN 3) Introduce a compulsory final project (Bachelor's thesis) to the curriculum of the Bachelor's programme. The final project should introduce students to research activities and independent practical laboratory work.
- A 4. (ASIIN 5.1) The module descriptions need to include information about the students total workload (hours per semester) and the awarded ECTS points.

Recommendations

- E 1. (WFME 6.6) It is recommended to increase students' academic mobility by establishing more international cooperations and encouraging and better supporting medical students to spend some part of their medical education abroad.
- E 2. (WFME 5.2) It is recommended to further improve the teachers' English proficiency.
- E 3. (WFME 2.5) It is recommended to provide students with more hands-on experience with patients during the clerkships.
- E 4. (WFME 2.1) It is recommended to improve the integration of preclinical and clinical courses.

I Decision of the Accreditation Commission (09.12.2022)

Assessment and analysis for the award of the ASIIN seal:

After a brief discussion of the procedure, the ASIIN Accreditation Commission decides to accredit the degree programme with four requirements and four recommendations as proposed by the peers and the Technical Committee.

The Accreditation Commission for Degree Programmes decides to award the following seals:

Degree Programme	ASIIN seal	Subject-specific labels	Maximum duration of accreditation
Undergraduate Programme for Medical Doctor	With requirements for one year	--	30.09.2029

Requirements

- A 1. (WFME 6.6) Draft a guideline for recognising credits achieved outside MNUMS that is aligned with the Lisbon convention.
- A 2. (ASIIN 2.2) Verify the students' total workload and adjust the awarded ECTS points accordingly.
- A 3. (ASIIN 3) Introduce a compulsory final project (Bachelor's thesis) to the curriculum of the Bachelor's programme. The final project should introduce students to research activities and independent practical laboratory work.
- A 4. (ASIIN 5.1) The module descriptions need to include information about the students total workload (hours per semester) and the awarded ECTS points.

Recommendations

- E 1. (WFME 6.6) It is recommended to increase students' academic mobility by establishing more international cooperations and encouraging and better supporting medical students to spend some part of their medical education abroad.
- E 2. (WFME 5.2) It is recommended to further improve the teachers' English proficiency.

- E 3. (WFME 2.5) It is recommended to provide students with more hands-on experience with patients during the clerkships.
- E 4. (WFME 2.1) It is recommended to improve the integration of preclinical and clinical courses.

Appendix: Programme Learning Outcomes and Curricula

According to the Self-Assessment Report, the following **objectives** and **learning outcomes (intended qualifications profile)** shall be achieved by the undergraduate programme medicine:

- Develop the students' clinical skills and thinking, and possess the ability to solve any problems comprehensively.
- Develop the integration between the biomedical and clinical training.
- Enhance the students' cognitive skills by transferring from the cases to general principles.
- Provide sufficient practice time to revise and consolidate the acquired knowledge and skills.
- Increase the students' opportunities to independently plan, manage and electively study.
- Possess the medical research methods and encourage the interests to conduct the research.
- Develop the students' clinical skills and methods from the beginning of the courses.
- Acquire the medical ethics.

The following **curriculum** is presented:

Premedical courses:

	Courses	Credit	ECTS	Years of study /grade/
	Basic courses	59	94.4	
1	Medical English	3	4.8	1
2	Basics of medical genetics	2	3.2	2
3	Medical physics	2	3.2	1
4	Medical chemistry I	2	3.2	1
5	Medical chemistry II	2	3.2	1
6	Anatomy I	3	4.8	1
7	Anatomy II	3	4.8	1
8	Physical education	2	3.2	1
9	Biology	3	4.8	1
10	Biochemistry	3	4.8	2
11	Microbiology	3	4.8	2
12	Foreign language	2	3.2	1
13	Histology	4	6.4	1
14	Immunology	2	3.2	2
15	Radiology	1	1.6	2
16	Pathology	1	1.6	2
17	Molecular and cellular biology	2	3.2	2
18	Mongolian history, culture and customs	2	3.2	1
19	Professional basic skills	2	3.2	2
20	Introduction to Public health	2	3.2	2
21	Communication skills	1	1.6	1
22	Embryology	1	1.6	2
23	Applied mathematics	1	1.6	1
24	Pharmacology	2	3.2	2
25	Pathophysiology	2	3.2	2
26	Health management	1	1.6	1
27	Physiology I	3	4.8	2
28	Physiology II	2	3.2	2
Compulsory courses				
29	Laboratory	1	1.6	1
30	Basic clinical examination	2	3.2	2
31	Elective courses	4	6.4	1
32	Introductory practice	2	3.2	2
2 year of premedical		68	108.8	

0 Appendix: Programme Learning Outcomes and Curricula

No	Courses	Credit	ECTS	Year of study /grade/
1	Basic courses	68	108.8	1-2 year of study
Professional courses				
2	BLOCK - IA Preclinical courses	9	12.8	Third year/grade
	Pathological physiology II	3	4.8	
	Pathology II	2	3.2	
	Pharmacology	2	3.2	
	Immunology II	2	3.2	
3	BLOCK- IB Basics of clinical medicine	7	11.2	Third year
	Emergency care	1	1.6	
	Surgery	1	1.6	
	Diagnostics of internal medicine	3	4.8	
4	General Hygiene	1	1.6	
5	BLOCK – II Internal medicine I	15.5	24.8	Third year
	Rheumatology	1	1.6	
	Clinical microbiology	0.5	0.8	
	Epidemiology	2	3.2	
	Infectious diseases	1	1.6	
	Rehabilitation medicine	1	1.6	
	Radiology	1	1.6	
	Endocrinology	1	1.6	
	Gastroenterology	2	3.2	
	Hematology	1	1.6	
	Pulmonology	2	3.2	
	Cardiology	2	3.2	
	Nephrology	1	1.6	
7	BLOCK – III Internal medicine II	17	27.2	Fourth year
	Hematology	1	1.6	
	Medical ethics	2	3.2	
	Biostatistics	2	3.2	
	Radiology II	1	1.6	
	Tuberculosis	1	1.6	
	Gastroenterology	2	3.2	
	Rheumatology	0.5	0.8	
	Medical genetics II	1	1.6	
	Clinical microbiology	0.5	0.8	
	Pulmonology	2	3.2	
	Endocrinology	1	1.6	
	Cardiology	2	3.2	
	Nephrology	1	1.6	

0 Appendix: Programme Learning Outcomes and Curricula

8	BLOCK – IV Surgery Pediatric surgery Oncology Emergency care Pediatrics Clinical microbiology Traumatology and Orthopedics Urology Surgery Rehabilitation medicine Infectious diseases	16.5 1 2 1 1 0.5 3 2 4 1 1	26.4 1.6 3.2 1.6 1.6 0.8 4.8 3.2 6.4 1.6 1.6	Fourth year
9	BLOCK-V Psycho, neuro, sensory Allergology Neurology Psychiatry Ophthalmology Dermatology Otorhinolaryngology Infectious diseases Rehabilitation medicine Clinical microbiology Radiology	21 2 3 4 3 3 3 1 1 0.5 0.5	32 3.2 4.8 6.4 4.8 4.8 4.8 1.6 1.6 0.8 0.8	Fifth year
10	BLOCK - VI Life cycle Pediatrics Infectious diseases Obstetrics and Gynecology Family medicine	19 6 1 6 6	30.4 9.6 1.6 9.6 9.6	Fifth year
11	Clerkship - I Infectious diseases I Gastroenterology II Clinical Pharmacology Rheumatology II Hematology II Surgery II Psychiatry II Pulmonology II Cardiology II Endocrinology II Nephrology II	10.5 1 1 0.5 1 1 1 1 1 1 1 1	16.8 1.6 1.6 0.8 1.6 1.6 1.6 1.6 1.6 1.6 1.6 1.6	Sixth year
12	Clerkship - II Family medicine II Traumatology and Orthopedics II Pediatric surgery II Forensic medicine, Medical law II Oncology II Obstetrics and Gynecology II Pediatrics II Emergency care II Clinical Pharmacology	8.5 1 1 1 1 1 1 1 1 0.5	13.6 1.6 1.6 1.6 1.6 1.6 1.6 1.6 1.6 0.8	Sixth year

0 Appendix: Programme Learning Outcomes and Curricula

13	Basic Elective Courses (1-2 course)	4	6.4	First-second year
14	Clinical Elective Courses (3-5 course)	6	9.6	Third-fifth year
15	Introductory Practice	2	3.2	First year
16	Clinical practice – I	2	3.2	Third year
17	Clinical practice – II	3	4.8	Fourth year
18	Clinical practice – III	3	4.8	Fifth year
Workload		207 credits	331.2 ECTS	