SPECIFICATION OF BACHELOR OF MEDICINE AND SURGERY (MB ChB) OF THAMAR UNIVERSITY FACULTY OF MEDICINE & HEALTH SCIENCES

Thamar University Faculty of Medicine & Health Sciences (TUFMHS) offers undergraduate program in Medicine leading to the degrees of Bachelor of Medicine and Surgery (MB ChB). TUFMHS was founded in 1998 by a decision of the Ministry of Higher Education and Scientific Research, according to *Republican Decree* No. 158 of 1996, establishing the Thamar University. TUFMHS is one of the first faculties established at the Thamar University and it is the only one in the governorate that offers public medical academic education. All degree and certificate programs at TUFMHS are approved and officially registered with the Ministry of Higher Education in Yemen.

1. Program Identification and General Information

Program title	Bachelor of Medicine and Surgery (MB ChB)
Responsible faculty to grant degree	Thamar University Faculty of Medicine & Health Sciences (TUFMHS)
Responsible Departments	TUFMHS is founded on two sectors: *Preclinical Sciences Sector* and *Clinical Sciences Sector*. These sectors include the following departments and units **A- Preclinical Sciences Sector** which includes two major departments: 1. **Department of Basic Medical Sciences** which is subdivided into the following units: Anatomy and Embryology; Histology**;** Physiology; and Biochemistry. 2. **Department of Applied Biomedical Science** which is subdivided into the following units: Pathology; Forensic Medicine and Clinical Toxicology; Medical Microbiology and Immunology; Medical Biochemistry, Medical Parasitology; Medical Pharmacology; and Community Medicine **B- Clinical Sciences Sector:** This sector includes four major departments 1. **Department of Surgery** which is subdivided into the following units: General Surgery; Specialized Surgery; Ophthalmology; Otorhinolaryngology (ENT); and Radiology. 2. **Department of Internal Medicine** which also includes Psychiatry; and Dermatology units. 3. **Department of Obstetrics and Gynecology** which encompasses the two subspecialties of gynecology and obstetrics.

	4. **Department of Pediatrics**, which includes the main subspecialties of the medical care of infants, children and adolescents.
Other departments with teaching contributions	Faculty of Education and Faculty of Computer Sciences to Deliver university requirements.
Coordinators	- Dean of the Faculty o Vice Dean of Academic Affairs ▪ Head of Preclinical Sciences Sector ▪ Head of Clinical Sciences Sector o Vice Dean of Hospitals and Clinical Training Affairs o Vice Dean of Postgraduate and Scientific Research o Vice Dean of Student Affairs
Language of study	English Language
Mode of study	Full time
System of study	Single, yearly-system, credit hour-based / (Vertical and horizontal integrated system)
Total credit hours needed for completion of the program	• Total credit hours = 263 of education system (+ 17 of university requirements = 280). • Total number of contact hours = 5,520 hours of medical education (+ 255 hours of university requirements = 5,775) • Total work load is expected to be11, 550 hours of medical education. Average of total workload per one academic year is 1,840hours.
Time period of study in the program	• Six academic years followed by 12 months of clinical internship. o Teaching is 30 weeks in the first five years (the 1st to the 5th levels) and 40 weeks in the sixth year. o The examination period is expected to cover another 6 weeks. • The first three years will be regarded as pre-clinical years and the others as clinical years
Award granted on completion of the program	Bachelor of Medicine and Surgery (abbreviated as MB ChB,MB BCh, or MBBS)
Location(s) where the program is offered	-TUFMHS main campus, Thamar University, Dhamar city, Dhamar Governorate, Yemen. -Thamar University Al-Wahdah Teaching Hospital (TUWTH), Maabar city, Dhamar Governorate, Yemen.
Date of program development	The MB ChB program of TUFMHS was started in the 1998/1999academic year and this is an updated specification that has been ongoing since the 2015-2016 academic year.
Approval date:	

2. Vision, Mission and Aims of the Faculty

Faculty Vision

The vision of the TUFMHS is to become one of the leading medical faculties in Yemen and in the region.

Faculty Mission:

The TUFMHS strives to graduate highly qualified and skilled physician competent on the national, regional and international levels through an interactive educational curriculum and efficient teaching and learning strategies aiming to serve the community and contribute towards improving the state of domestic and regional health.

Faculty Aims:

The Aims of the TUFMHS are to:

1- Qualify physicians capable of dealing with various health problems and facing different clinical situations after receiving the required knowledge and high medical training.
2- Participate efficiently in the improvement of health services and enhancing the awareness and education of health issues within the community.
3- Provide a motivating medical-research environment to faculty members and students.
4- Develop fruitful relationships and exchange of expertise between the faculties of medicine of various local, regional and international universities.

3. External References

- Development of the program was based on:

1) Recognized international academic standards: **(Annex 1)**

- Council for Accreditation & Quality Assurance (CAQA) – Yemen
- National Academic Reference Standards (NARS) for Bachelor degree of medicine – Egypt
- Standards and Guidelines for Quality Assurance in the European Higher Education Area (ENQA)
- Tomorrow`s doctor (2009).

2) Similar regional and international benchmarks to our program: **(Annex 2)**

- Cairo University.
- King Saud University.
- Sri Lakshmi Narayan India.
- JAFFNA University.
- Jordan University .
- Newcastle University.

4. Program Mission

The academic program leading to MB ChB from TUFMHS is committed to graduate proficient physician through an interactive educational curriculum and efficient teaching and training strategies aiming to serve the community and deliver high quality patient care.

5. Program Aims

The aim of the program is to ensure that students achieve high clinical competence required to produce caring, professional and ethical physicians through:

1- Providing efficient knowledge and understanding of the theoretical basis of clinical practice, including biomedical sciences, diagnostic and therapeutic rationales and perspectives on behavior and populations.

2- Applying the teaching and practical strategies suitable for the preclinical and clinical levels of the program to ensure the enhancing of critical thinking and appraisal along with communication and clinical skills.

3- Creating a favorable atmosphere of training and direct supervision to carry out practical procedures safely and working efficiently with the health care team.

4- Ensuring practicing of medicine safely, within an ethical framework, with insight and compassion, according to the legal requirements and professional expectations of medical practice in the country.

5- Enhancing the ability of working independently with high level personal motivation and lifelong learning and research competencies.

6. Graduate Attributes:

The graduates completing MB ChB program from TUFMHS will be able to:

1- Acquire knowledge and understanding of the sciences required for medical practices in relation to individuals and society.

2- Practice medicine in primary health care units and hospitals with sufficient clinical, professional and personal skills.

3- Apply the diagnostic and problem-solving skills necessary for proper evaluation and management of common diseases and emergencies.

4- Apply the principles of evidence-based medicine and cost effectiveness in making decisions about the utilization of available medical resources.

5- Present ethical and professional behavior necessary for the establishment of excellent communication with patients or health care providers.

6- Develop a continuous learning competency required for professional development to meet today's medical challenges.

7- Recognize own personal and professional limits and seek help from colleagues and supervisor when necessary.

7. Intended Learning Outcomes: (ILOs)

A- Knowledge and Understanding Skills:

Upon successful completion of the medical education program, the graduate will be able to:

A1. Explain the principles of clinical practice including; biomedical sciences, diagnosis and therapeutic rationales and perspective on behavior and populations.

A2. Describe the normal structure and function of human body and the role of body homeostasis in relation to the age, gender and genetic variations.

A3. Recognize the basis of medical ethics, medico-legal aspects of malpractice and common medical errors.

A4. Define etiology, pathogenesis, clinical features of diseases and their complications and differential diagnosis.

A5. Identify the role of genetics in health and diseases and the basic principle of gene therapy and genetic counseling.

A6. Recognize the international guidelines of management for diseases and life threatening conditions including the pharmacological treatment and the indication for surgical and non-surgical interventions.

A7. Identify the principles of health promotion, disease prevention and control of common community health problems, taking into consideration physiological, social and environmental factors.

A8. Know the required sciences that develop the skills of communication with the community.

B- Intellectual Skills:

Upon successful completion of the medical education program, the graduate will be able to:

B1. Integrate basic anatomical, biochemical and physiological facts with clinical data.

B2. Organize the plans of investigation and intervention for medical problems according to the cost effectiveness and potentiality expectation.

B3. Combine the medical history and results of clinical investigation into a meaningful diagnostic formulation.

B4. Formulate a management plan for the common diseases and emergency cases according to established and evolving clinical evidences.

B5. Appraise the serious illnesses and manage time and priorities to perform common emergency and life-saving procedures.

B6. Recognize the personal and professional limitations and seek assistance.

C- Practical and Clinical Skills:

Upon successful completion of the medical education program, the graduate will be able to:

C1. Obtain an accurate medical history and perform complete physical examination appropriate to age and gender in acute and chronic clinical conditions.

C2. Apply proper investigations to assess altered structures and functions of the body and determine the likely diagnosis.

C3. Perform routine medical procedure and demonstrate the ability of using common medical tools required for diagnosis and management with highly qualified competency.

C4. Prescribe a safe prescription of suitable types of drugs clearly and accurately according to health condition and potential benefits and risks.

C5. Apply the principles of disease surveillance and screening to assess the health and mental status of the community where the graduates are serving**.**

C6. Compose an initial plan of management for stabilization of injured and critically-ill patient and providing the first aid measures for them.

D. General and Transferable Skills

Upon successful completion of the medical education program, the graduate will be able to:

D1. Communicate effectively with patients, their families and the community through verbal, written and other non-verbal means.

D2. Work independently or within a multidisciplinary team efficiently and respect the roles and contributions of other health care professions for effective patient management.

D3. Respect the different cultural beliefs, ethics and values for community and follow the institutional and national roles of medical practice

D4. Establish a lifelong learning and utilize computer programs and information technology required to personal and professional development.

8. Curriculum Map

Level	Course Name	ILOs																							
		A1	A2	A3	A4	A5	A6	A7	A8	B1	B2	B3	B4	B5	B6	C1	C2	C3	C4	C5	C6	D1	D2	D3	D4
1	Anatomy1 and Embryology		I							I						I	I								I
1	Histology1		I							I						I	I								I
1	Biochemistry 1	I	I		I	I				I						I	I						I		I
1	Physiology1	I	I			I				I						I	I								I
1	Community Medicine Basics	I				I		I				I										I			
1	Medical Eng. 1& 2								I													I			I
1	Arabic 1&2								I													I			I
1	Computer Science								I													I			I
1	Islamic Culture								I													I		I	
1	National Culture								I													I			I
2	Anatomy 2 and Embryology		I							I						I	I								I
2	Histology2		I							I						I	I								I
2	Biochemistry 2	I	I		I	I				I		I					I	I					I		I
2	Physiology2	I	I							I						I	I								I
2	Environmental & occupational health	I						I				I								I					
2	Medical ethics			I						I												I		I	
3	Pathology	I	I		R					I		I	I				I			I					R
3	Microbiology	I			R			I				I					R	I					I		R
3	Pharmacology	I					I						I						I		I				R
3	Parasitology	I			R			R				I	I				R				I				R
3	Epidemiology and biostatistics	I						R					I							R					
3	Basic clinical and communication skills	I			R			R	M	I		I	I	I		I	R	I			I	I	R		
3	Human Genetics	R			R	I					I						R		I					I	R
4	Surgery 1	R			R		R			R	R	R				R	R	R			R	R			R
4	Medicine 1	R			R		R			R	R	R	R			R	R	R				R	R	R	R
4	Obst. &Gynecology 1	R			R		R					R	R			R	R	R				R			R
4	Forensic medicine	R		R	R							R					R							R	R
4	Health care policy & systems	R						R			R		R		I						R			R	
5	Inter. Medicine 2	R			R		R			R	R	R	R			R			R		R	R	R		R
5	Pediatrics 1	R	R		R		R			R			R	R		R		R	R		R	R	R	R	R
5	ENT		R		R		R			R	R		R	R		R	R		R			R	R		R
5	Ophthalmology	R			R		R				R		R				R	R	R			R	R		
5	Psychiatry	R					R					R	R			R			R	R		R			R
5	Dermatology				R		R	R				R	R			R		R	R		R	R	R	R	R
5	Radiology	R	M		R		R			R	R	R		R			R	R				R			R
5	General Surgery 2	R			M		R				R	R		R		M	R	R				R			R
5	Research project															M				M		M			R
6	Clinical Pharm.& Therapeutic			R		R	M			R	R		R						R			M	M	M	M
6	Inter. Medicine 3		M		M		M			M	M	M	M			M	M		M			M	M	M	M
6	Surgery 3				M		M				M		M	M	M	M	M	M	M		M	M	M	M	M
6	Obst. &Gynecology 2				M		M					M	M	M	M	M	M	M	M		M	M	M	M	M
6	Pediatrics 2				M		M			M	M	M	M			M	M	M	M			M	M	M	M

I=Introduced R= Reinforced M= Mastered

9. Teaching Strategies and Assessment Strategies:

ILOs		Teaching Strategies	Assessment Strategies
A- Knowledge and Understanding	**A1** **A2** **A3** **A4** **A5** **A6** **A7** **A8**	1- Lectures. 2- Clinical case presentations. 3- Small group discussion 4- E-learning classes.	1- Written exam (Multiple Choice Questions (MCQs), Short-answer questions (SAQs), and long and short assay) 2- Oral exam. 3- External examiner assessment 4- Case report.
B- Intellectual skills	**B1** **B2** **B3** **B4** **B5** **B6**	1- Tutorials. 2- Brain storming. 3- Clinical rounds. 4- Clinical case presentation. 5- Small group discussion. 6- Case-problem solving	1- Quizzes. 2- Oral exam. 3- Objective structural clinical exam (OSCE) 4- External examiner assessment 5- Case report.
C- Practical and clinical skills:	**C1** **C2** **C3** **C4** **C5** **C6**	1- Case presentations 2- Laboratory practical sessions 3- Clinical rounds (In the departments of the hospital, bed-side teaching and clinical case discussion) 4- Supervised training sessions 5- Simulations (in Skill lab)	1- Oral exam. 2- Objective structural clinical exam(OSCE) 3- Practical clinical exam. 4- Lap reports. 5- External examiner assessment. 6- Case report. 7- Clinical Log-book.
D- General and transferable skills	**D1** **D1** **D3** **D4**	1- Tutorials and seminars. 2- Supervised training sessions. 3- Small group researches. 4- Self learning. 5- Written assignments.	1- Graduation research. 2- Seminar and presentation assessment. 3- External examiner assessment.

10. System of Study

a) Program duration:

- The program should extend over a period of not less than 6 years;
- The six academic years is followed by one year internship clinical experience;
- The first three years will be regarded as preclinical years and the others as clinical years;
  - *Preclinical years*: the length of study for the first, second and third academic year is 36 weeks each.
  - *Clinical years*: the length of study for the fourth and fifth year is 36 weeks each. However, the length of study for the sixth academic year is 40 weeks (divided into 4 terms of clinical rotations of 10 weeks length).
- The examination period (Med and final exams) is expected to cover 6 weeks.

b) Program structure:

- An academic year is a yearly system and teaching activities is a full year period of 36 weeks included examination, according to the program courses, as the following:
  - All the teaching activities during the preclinical years are full year period of 36 weeks included examination. Assessment of individual courses will be made periodically throughout the course. Towards the end of each preclinical year, a Faculty Examination will be held.
  - The theoretical teaching during the fourth and fifth clinical years is full year period of 36 weeks or divided into two period of 18 weeks in some minor courses. However, the practical session is divided into clinical rotation/clinical clerkship (Hand on Clinical Experience, except *Healthcare Policy & Systems* which recognized as Clinical Practicum or Observation). Assessment of individual course will be made periodically throughout the course and after each clinical rotation. Towards the end of fourth and fifth clinical years, a Faculty Examination will be held.
  - A master seminar for each course and practical teaching during the sixth year is divided into 4 rounds (10 weeks each) of clinical rotation/clinical clerkship (Hand on Clinical Experience). Assessment of individual course will be made periodically after each clinical rotation. Towards the end of the sixth year, a Bachelor Examination will be held which also includes Professional External Examiners.
  - Internship clinical experience year include both compulsory Major courses and elective Minor courses. More details about this section is explained in the *Study Plan*.

c) Credit system:

- A “credit hour” is the unit of measuring academic work and progress toward a degree. Students typically receive credit hours on the basis of the number of "contact hours" per week in class, for one academic year. The actual amount of academic work (this not includes exam/paper/activity due during exam 6 weeks)

that goes into a single credit hour is calculated as follows:

- Lecture/Seminar/Tutorial: 1 credit hour for 15 contact hours
- Laboratory/Discussion:1 credit hour for 30 contact hours
- Clinical experience (clerkship/clinical rotation)/ Internships, field: 1 credit hour for 30 contact hours

Examples:

- Clinical rotation contact hour: A 4 credit hour rotation would be scheduled to meet 120 hours (4 credits x 30 hours)

- Lecture contact hour: A 4 credit hour lecture would be scheduled to meet 60 hours (4 credits x 15 hours)

- ***Total number of contact hours*** = 5,520hours of medical education (+ 255hours of university requirements = 5,775)
  - Total contact hours for preclinical stage (1st to 3rd year levels) = 2,385.
  - Total contact hours for clinical courses (4th to 6th year levels) = 3,135
  - Total contact hours for university requirements = 255hours

- ***Total Number of credit hours*** = 263 of medical education + 17 of university requirements = 280)
  - Total credit hours for preclinical stage = 114
  - Total credit hours for clinical stage = 149
  - Total credit hours for University requirements = 17

d) Total workload:

The total workload student should expect to spend is twice the number of contact hours

- Expected total workload = 11,550 hours of medical education.
- Average of total workload per one academic year = 1,925 hours of medical education.

Courses Distribution

Program Requirement	%	
• University requirement	6.1 % of total contact hours	
• Pre-clinical courses of program	40.7 %	100 % of medical education
• Clinical courses of program	53.2%	
• Internship	12 months of clinical experience	

11. Study Plan

University Requirements

Code	Course Title	Credit Hours	Contact Hours/Week			Total No. of Contact Hours
			Lecture	Practical	Tutorial	
B0101101	**Arabic 1 & 2**	4	2	-	-	60
B0101102	**Islamic Culture**	2	1	-	-	30
B0101103	**Medical English 1 & 2**	4	2	-	-	60
B0101104	**Computer Science**	3	1	-	-	45
B0101105	**National Culture**	4	2			60
	Total	12	8	-	-	255

Courses of the Program

- First Year (36 weeks)

Code	Course Title	Credit Hours	Length of the Study = 30 weeks + 6 weeks for Periodic and Final Faculty Exams			Total No. of Contact Hours	Department/Unit Responsible for Delivery
			Contact Hours/Week				
			Lecture	Practical	Tutorial		
B0101111	**Anatomy I& Embryology I**	14	4	4	1	270	Anatomy
B0101112	**Histology I**	6	2	2		120	Histology
B0101113	**Biochemistry I**	8	3	2		150	Biochemistry
B0101114	**Physiology I**	10	4	2		180	Physiology
B0101121	**Community Medicine Basics**	2	1			30	Community Medicine
	Total	40	14	10	1	750	
			25				

- Second Year (36weeks)

Code	Course Title	Credit Hours	Length of the Study = 30 weeks + 6 weeks for Periodic and Final Faculty Exams			Total No. of Contact Hours	Department/ Unit Responsible for Delivery
			Contact Hours/Week				
			Lecture	Practical	Tutorial		
B0101215	**Anatomy II & Embryology II**	14	4	4	1	270	Anatomy
B0101216	**Histology II**	6	2	2		120	Histology
B0101217	**Biochemistry II**	8	3	2		150	Biochemistry
B0101218	**Physiology II**	10	4	2		180	Physiology
B0101222	**Environmental & Occupational Health**	4	2			60	Community medicine
B0101219	**Medical Ethics & Law**	2	1			30	Community Medicine
	Total	44	16	10	1	810	
			27				

- Third Year (36 weeks)

Code	Course Title	Credit Hours	Length of the Study = 30 weeks + 6 weeks for Periodic and Final Faculty Exams			Total No. of Contact Hours	Department/ Unit Responsible for Delivery
			Contact Hours/Week				
			Lecture	Practical	Tutorial		
B0101331	**Pathology**	12	4	2	1	210	Pathology
B0101332	**Microbiology and Immunology**	8	3	2		150	Microbiology
B0101333	**Pharmacology**	8	3	2		150	Pharmacology
B0101334	**Parasitology**	6	2	2		120	Parasitology
B0101323	**Epidemiology & Biostatistics**	4	1.5	1		75	Community medicine
B0101335	**Human Genetics**	2	1			30	Microbiology
B0101336	**Basic Clinical & Communication Skills**	4	1	2		90	Surgery and Internal Medicine
	Total	**44**	15.5	11	1	**825**	
			27.5				

-Fourth Year (36 weeks)

Code	Course Title	Credit Hours	Length of the Study = 30 weeks + 6 weeks for Periodic and Final Faculty Exams		Total No. of Contact Hours	Department/ Unit Responsible for Delivery
			Lecture	Practical/Clinical Clerkship) Students will rotate among attachments to the Clinical Department and Units)		
B0101441	**General Surgery I**	12	4 hours (30 weeks)	15 hours (8 weeks)	240	Surgery
B0101451	**Internal Medicine I**	12	4 hours (30 weeks)	15 hours (8 weeks)	240	Internal Medicine
B0101461	**Obstetrics & Gynecology I**	12	4 hours(30 weeks)	15 hours (8 weeks)	240	Obstetrics & Gynecology
B0101437	**Forensic Medicine & Toxicology**	4	1.5 hours (30 weeks)	15 hours (2 weeks)	75	Forensic Medicine and Toxicology
B0101424	**Healthcare Policy & Systems**	4	1.5 hours (30 weeks)	15 hours (2 weeks) Clinical Practicum	75	Community Medicine
	Total	**44**	15	14	**870**	
			29			

- Fifth Year (36 weeks)

Code	Course Title	Credit Hours	Length of the Study = 30 weeks + 6 weeks for Periodic and Final Faculty Exams		Total No. of Contact Hours	Department/ Unit Responsible for Delivery
			Lecture	Practical/Clerkship Students will rotate among attachments to the Clinical Department and Units)		
B0101552	**Internal Medicine II**	10	4 hours (30 weeks)	15 hours (4 weeks)	180	Internal Medicine
B0101542	**General Surgery II**	8	3 hours (30 weeks)	15 hours (4 weeks)	150	Surgery
B0101571	**Pediatrics I**	8	2 hours (30 weeks)	15 hours (8 weeks)	180	Pediatrics
B0101553	**Psychiatry**	3	2 hours (15 weeks[1])	15 hours (2 weeks)	60	Internal Medicine
B0101554	**Dermatology**	3	2 hours (15 weeks[2])	15 hours (2 weeks)	60	Internal Medicine
B0101543	**Ophthalmology**	4	2 hours (15 weeks[1])	15 hours (4 weeks)	90	Ophthalmology
B0101544	**Ear, Nose & Throat**	4	2 hours (15 weeks[2])	15 hours (4 weeks)	90	Surgery
B0101545	**Radiology**	2	1 hour (15 weeks[1])	15 hours (2 weeks)	45	Surgery
	Total	**42**	14.5	16	**915**	
			29.5			

[1] First half of the year
[2] Second half of the year

Note: Contact hours per week of 15 weeks length course are divided by 2

- Sixth Year (40 weeks)

Code	Course title	Length of Study	Credit Hours	Length of the Study = 40 weeks + 6 weeks for Periodic and Final Faculty and External Exams		Total No. of Contact Hours	Department/ Unit Responsible for Delivery
				Lecture/ Seminar	Practical (Clinical Rotation/Clerkship)		
B0101655	**Internal Medicine III**	Students will rotate among attachments to the four Clinical Departments (each rotation = 10 weeks)	12	2	34	360	Internal Medicine
B0101646	**General Surgery III**		12	2	34	360	Surgery
B0101662	**Obstetrics & Gynecology II**		10	2	28	300	Obstetrics & Gynecology
B0101672	**Pediatrics II**		10	2	28	300	Pediatrics
B0101637	**Clinical Pharmacology & Therapeutics**	15 weeks*	2	2	-	30	Pharmacology
B0101625	**Research Project**	**3**	**1 hour (30 weeks**	**30 hours**	**B0101525**	**Research Project**	**3**
	Total		**49**	10	124	**1350**	
				35			

*Given through Obstetrics & Gynecology II and Pediatrics II weeks

Internal Medicine includes the following Subspecialties for the undergraduate program:

Chest diseases, Neurology, Tropical Medicine, Venereal diseases and andrology, Rheumatology and Cardiovascular Diseases.

General Surgery includes the following Subspecialties for the undergraduate program:

Orthopedic Surgery, Neurosurgery, Heart and Chest Surgery, Urosurgery, Anesthesia, Radiology and Emergency.

Internship

The candidate student for internship (house officer) is the one who completed the 6th year successfully. The house officers should spend 1 year (12 months) attending the following departments and participate in their daily activity and should perform the required procedures and must register in his official log book provided by the clinical departments of the TUFMHS according to the following:

Department	Duration
Surgery	2 months
Internal Medicine	2 months
Obstetrics & Gynecology	2 months

Pediatrics	2 months
Specialized Surgery	1 month
Specialized Medicine	1month
Community Medicine	1 month
Emergency	1 month

12. Degree and Graduation Requirements

Regulations for progression and program completion

1- Students should pass all courses of preclinical studies to be promoted to clinical stage.

2- A student who fails in more than two courses has to repeat the academic year.

Student's achievement (grades)

For preclinical stage (basic sciences):

- Final exam (Written and oral) →60%
- Final-Practical exam →20%
- Med-year exam (Written &Oral) → 20%

Total grade score of the three exams → 100%

For clinical stage(clinical sciences):

-For 4th and 5th years:

- Written exam →70%
- Practical exam →20%
- Oral exam →10%

Total grade score of the three exams → 100%

- For 6th year:

- Written exam → 40%
- External practical exam → 40%
- Internal practical exam → 20%

Total grade score of the three exams → 100%

The student, in the preclinical and the clinical stages, to pass any exam should have at least:

- Minimum 40% of written exam
- Minimum 50% of clinical and oral exam
- Minimum 65% of the total marks

If the student fails at any part of the exam, he has to repeat this subject even if his/ her total

marks are more than 65% (each exam is considered as independent exam).

- For the final exam of the 6th level students it should include at least 20% from the subjects that have been taken at the 5th level or 4th level.
- External examiners will be part of the board of exam for the final (6th) year exam. This is a part of the monitoring and continuous evaluation of this program.

13. Requirements:

Admission to the faculty of medicine is regulated according to the laws of student affairs that is approved by the High Committee of Ministry of Higher Education. **(Annex 3)**

14. Facilities required to implement the program:

a. Learning Resources:
   -Available references and Text books.**(Annex 4)**
b. Laboratories, equipment, tools and educational materials. **(Annex 5)**
c. Academic staff who contribute to teach this program according to their departments. **(Annex 6)**

15. Program evaluation and improvement

Program evaluation and improvement:		
Targeted	**Assessment method**	**Sample**
1. **Senior students**	Questionnaires Meeting	Representative sample
2. **Alumni**	Questionnaires Meeting	Representative sample
3. **Faculty staff**	Questionnaires Meeting	Representative sample
4. **Other Stakeholders**	Questionnaires Meetings	Representative sample
5. **External examiners**	Revision and audit report	Report
6. **Peer Evaluations**	Repots by quality unit	Frequent report