



# Program Handout

## 2022-2023

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

Version 2: 2022-2023

## Content

<b>Content</b> .....	<b>2</b>
<b>Introduction</b> .....	<b>3</b>
<b>Section I: Program General Information</b> .....	<b>4</b>
Program General Information .....	5
Curriculum Description.....	9
Curriculum Type: Integrated curriculum .....	9
Curriculum Framework: SaudiMED: Competence-Based curriculum	<b>Error! Bookmark not defined.</b>
<b>SaudiMED</b> .....	<b>9</b>
Why SaudiMed? .....	14
<b>Program Structure &amp; Organization</b> .....	<b>Error! Bookmark not defined.</b>
Program Structure .....	<b>Error! Bookmark not defined.</b>
Curriculum Structure .....	<b>Error! Bookmark not defined.</b>
Program Study Plan .....	15
Capstone Courses.....	<b>Error! Bookmark not defined.</b>
Program Matrix.....	<b>Error! Bookmark not defined.</b>
Introduction.....	18
<b>Teaching &amp; Learning Methods</b> .....	<b>18</b>
<b>Assessment Methods</b> .....	<b>22</b>
<b>Section II: Program courses</b> .....	<b>24</b>
<b>First Year</b> .....	<b>25</b>
<b>Second Year</b> .....	<b>32</b>
<b>Third Year</b> .....	<b>38</b>
<b>Fourth Year</b> .....	<b>42</b>
<b>Fifth Year</b> .....	<b>48</b>
<b>Sixth Year</b> .....	<b>52</b>
<b>Field experience</b> .....	<b>Error! Bookmark not defined.</b>

## **Introduction**

The Faculty of Medicine Program manual provides general information for medical students, faculty, and staff on a wide variety of program learning outcomes, program contents, teaching and learning strategies, assessment methodologies, brief course description and program related regulations. This information is intended to provide a framework on which to build throughout the students' tenures at the Faculty of Medicine.

The Faculty of Medicine reserves the right to revise or modify the curriculum, system of evaluation, or graduation requirements as deemed appropriate by the faculty complying to all University and college policies, procedure and guidelines of curriculum development/improvement. Changes to college policies, procedures, or requirements will be provided in updates at meetings, in emails, on web pages, and/or in information memos.

## **Section I: Program General Information**

## Program ID

## Program General Information

<b>Program Name:</b>	Bachelor in Medicine, Bachelor of Surgery
<b>Qualification Level:</b>	7
<b>Total Credit Hours for Completing the Program</b>	216 CH
<b>Professional Occupations/Jobs</b>	General Practitioner

### Program Mission:

The program is preparing physicians with cognitive, clinical and research competencies to provide health services that enhance community health locally and regionally.

### Program Strategic Goals

- G1. Graduating physicians who are qualified, skillful and accomplish job ethics.
- G2. Enhance the practice of leadership, and effective communication.
- G3. Develop the skills of teamwork, and self-learning
- G4. Improving the quality of health services and community partnership
- G5. Encouraging scientific medical research

## Graduate attributes

### Northern Border University Graduate attributes

GA1: National identity	GA1: demonstrate high standards of ethical and socially responsible behavior, as well as academic and professional honesty and integrity; contribute to finding solutions to social problems; and commit to being a responsible citizen.
GA2: Self-management & Critical thinking	GA2: Demonstrate self-management skills, self-learning and critical thinking, the ability to take initiative to self-develop according to specific standards, and ability to present evidence and arguments to make a decision unbiasedly.
GA3: Digital culture	GA3: Effectively use information technology, analytical, mathematical, and statistical tools to perform data analysis, suggest solutions, and solve problems using critical thinking.
GA4: Teamwork	GA4: Have the ability to lead a team, assume responsibility for performing tasks and developing work, achieve goals effectively, and promote health, psychological and social aspects.
GA5: Entrepreneurship	GA5: Identify the function of entrepreneurship and its requirements in the successful, commercial application.
GA6: Communication skills	GA6: Effectively communicate both verbally and in writing, using appropriate presentation forms, scholarly language, adequate reasoning for various issues and dealing with beneficiaries.



### Program Graduate Attributes

In 2018, the Faculty of Medicine approved the alignment of the curriculum with the SaudiMeds framework; a framework comprises the essential learning outcomes and competences for the medical education in Saudi Arabia. Hence, we adopted the six major themes related to the description of the physician's duties and obligations as graduate attributes:

- **Scientific approach to medical practice;** integrates and applicates basic, clinical, behavioral and social science in clinical practice.
- **Patient-centered practitioner;** establishes and maintains essential clinical and interpersonal skills to demonstrate proficient assessment and delivery of patient-centered care and management.
- **Community-oriented practitioner;** practices and understands the Saudi health care system and the application of health promotion and advocacy roles for the benefit and wellbeing of individual patients, communities, and populations.
- **Effective communicator:** effectively communicates with patients and their families and the practicing of collaborative care by working in partnership within a multi-professional team.
- **Professional practitioner:** committed to deliver the highest standards of ethical and professional behavior in all aspects of health practice and take a responsibility for own personal and professional development.
- **Scholar practitioner:** contribute to the advancement of medical practice with the rigors of scientific research.

### Program learning Outcomes

The graduates will have the knowledge and applied skills to practice medicine reflectively and compassionately for the benefit of their patients and the community. They will maintain the highest standards of professional behavior through integrity, respect, and openness in communication, which will meet the expectations of the patients and sustain the trust of the community.

<b>Knowledge and understanding :</b>	
<b>K1</b>	Identify the human organs and tissues and their anatomical, physiological, biochemical, molecular and cellular characteristics in health and disease
<b>K2</b>	Explain the epidemiology, clinical presentations, and management for different medical problems with their related Islamic, ethical and safety issues
<b>K3</b>	Describe the parts and regulations of Saudi healthcare system
<b>K4</b>	Discuss health promotion and disease prevention measures
<b>K5</b>	Explain the basics of medical informatics; evidence-based medicine, and scientific research and their applications in healthcare system.
<b>Skills</b>	
<b>S1</b>	Use clinical reasoning, collected data analysis, decision making, and problem solving skills in medical practice
<b>S2</b>	Distinguish the organs' morphological, functional and biochemical features in health and diseases
<b>S3</b>	Apply the essential clinical skills
<b>S4</b>	Formulate appropriate management plans for patients with life-threatening common medical problems
<b>S5</b>	Practice certain maneuver for diagnosis of certain diseases and management of life-threatening conditions.
<b>S6</b>	Communicate effectively via written and verbal skills with peers, patients, relatives, and authorities to express his knowledge, research, recommendations and instructions.
<b>Values</b>	
<b>V1</b>	Demonstrate professional attitudes and ethical behaviors of knowledgeable, responsible, cooperative physicians
<b>V2</b>	Employ the skill of self-learning, self-reflection and development through updated medical information from different approved sources.

## Curriculum Description

### Program design

The choice of an educational philosophy will be driven by factors that may not be directly under the control or influence of the curriculum planner. For example, resources, culture and ethnographics, and available learning environments. It will be important that the curriculum must recognize the context in which healthcare will be delivered.

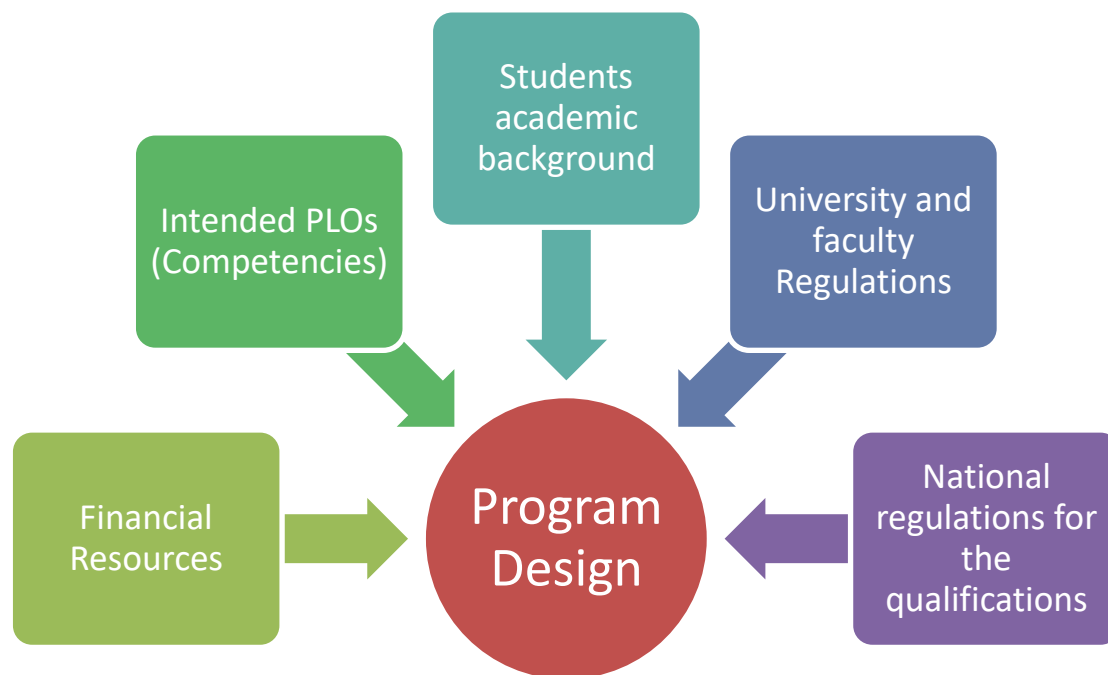


Figure (3): factors governing the academic program design

SPICES model stated that, the curriculum may be student-centered or teacher-centered, problem-based or information-oriented, Integrated/inter-professional or Subject-/discipline-based, Community-based or hospital-based, Elective-driven or uniform, and Systematic or Opportunistic.

Northern Border Medical program adopts hybrid model which is a mix of the previously mentioned model. This hybrid model allows the most appropriate pedagogical method to be used under individual circumstances and at different times during the program. For example, the study plan includes Integrated/inter-professional as well as Subject-/discipline-based for better understanding for the basic knowledge of the subsequently learnt topics. Also, clinical practice should not be exclusively hospital nor community based/led, and a hybrid approach of hospital and community

is appropriate as student is in need for hospital training as well as visiting primary healthcare community-based care clinics and community outreach healthcare campaigns in the extracurricular activities.

Additionally, based on the above philosophical model, the medical school is in need to take a view on the type of teaching it wishes to follow. Many ‘traditional’ medical courses rely heavily upon lectures to transmit information to students. Whilst this is a cost-effective method, doubts have been cast regarding the value of this approach to the learner. Small group working has advantages for the learner by allowing discussion of topics and giving the learner the opportunity to develop their own meaning of the information which, in turn, allows further progress towards independence and self-direction. It should be remembered, however, that some lectures can be inspirational and some small group work can fail to involve the student. A hybrid curriculum where there is a pragmatic approach to the use of lecture and small group activity may be a helpful compromise.

The program has some general courses which are related to the general sciences which can help their understanding for the medical sciences as well as some other courses covering topic in Arabic languages and Islamic culture which can improve their national identity concepts and improve their communication skills and work ethics. Additionally, the program has some elective courses that can be chosen a way from the medical studies. These general courses are expected to prepare them better to face challenges in the outside world. It promotes the student’s intellectual and cognitive skills. The curriculum structure is shown in the following table

#### 1. Curriculum Structure:

Program Structure	Required/ Elective	No. of courses	Credit Hours	Percentage
<b>Institution Requirements</b>	Required	3	6	2.77
	Elective	2	4	1.85
<b>College Requirements</b>	Required	14	31	14.35
	Elective	0	0	0
<b>Program Requirements</b>	Required	40	170	78.70
	Elective	2	1	0.46
<b>Capstone Course/Project</b>		0	0	0
<b>Field Experience/ Internship</b>	<b>Internship</b>	0	0	0
<b>Others</b>	<b>Free courses</b>	2	4	1.85
<b>Total</b>		<b>63</b>	<b>216</b>	<b>100</b>

## 2. Program Study Plan

MBBS program consist of 12 levels and one year field experience (internship). The arrangement of the courses within these levels is based on Bruner's spiral model with the following three main criteria:

**1. Cyclical:** Students should return to the same topic several times throughout the program wit different groups of staff (Horizontal integration)

**2. Increasing Depth:** Each time a student returns to the topic it should be learned at a deeper level and explore more complexity (Vertical integration);

**Prior Knowledge:** A student's prior knowledge should be utilized when a topic is returned to so that they build from their foundations rather than starting a new.

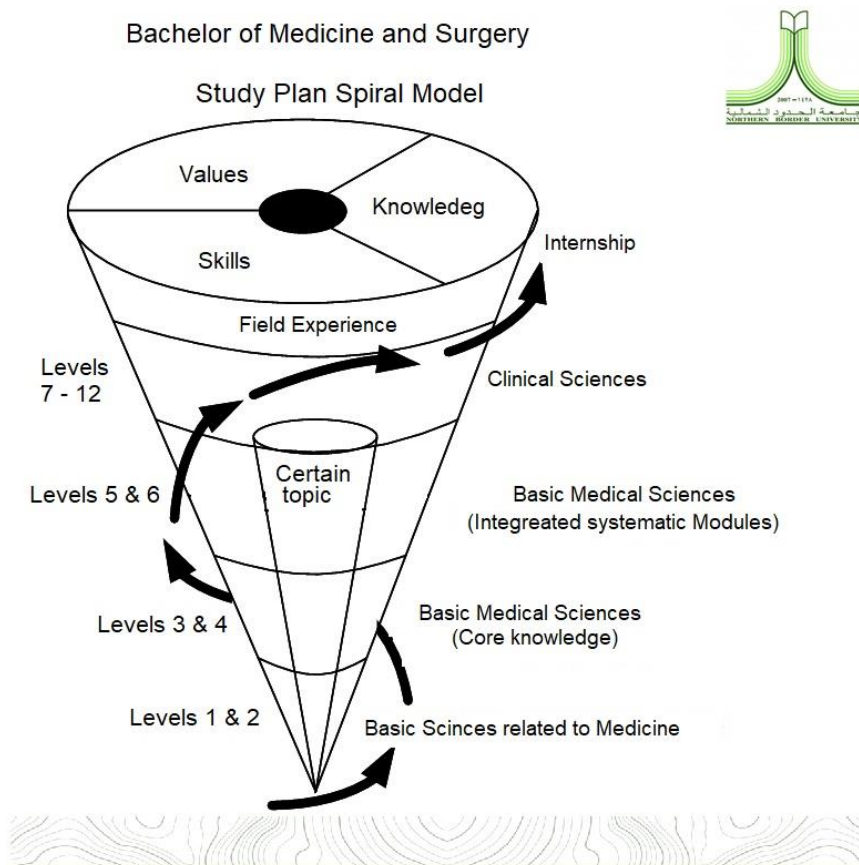


Figure (2): Spiral models of levels arrangement in MBBS of the Faculty of Medicine , NBU.

## Programs levels:

**Levels 1-3** (First Year): students learn basic concepts in chemistry, physics & biology as well as more of the English and Arabic languages in addition to communication skills, and the basic medical terminology .

**Levels 4-9** (Pre-clerkship) (during the second and third years): students study the basic academic medical sciences as core courses in the second year and integrated body system-wise curricula in the 3<sup>rd</sup> year.

**Levels 10-18** (Clerkship) (during the 4th, 5th and 6th years): they include the clinical clerkships in the hospitals and community health settings where the students practice the skills, attitudes and behaviors specific to each discipline and common to the practice of medicine in general.

**Internship:** Upon completion of all course requirements of the first six years the students spend 12 months as arranged by the internship unit.

The internship program components include:

- Mandatory rotations of 2-month duration in
  - General surgery
  - Internal medicine
  - Obstetrics and Gynecology
  - Pediatrics
- Mandatory rotations of 1-month duration in Emergency medicine and family medicine
- Added to that is two elective rotations of one month duration for each one, which depends on the student choice from a wide range of specialties (e.g. radiology, dermatology, urology etc. )

**The Credit Hour:** A credit hour represents one and half an hour of lectures, PBL, seminar, tutorial, bed side teaching or two-hours of practical, per week for one semester (10 weeks).

## **SaudiMED**

A national competence framework has been developed by medical schools in the Kingdom of Saudi Arabia (KSA), which adopted by National Commission for Academic Accreditation & Assessment (NCAA) and published as program learning outcomes and the expected characteristics of medical education graduates. Saudi Med started a project that began initially as an effort to develop a national consensus amongst Saudi stakeholders for the vision of the ‘Saudi Future Doctor’ and to develop the essential learning outcomes for medical schools. It aimed to provide some ways to assure minimum standards in the undergraduate medical education. Saudi MED framework was expressed as a three-level model:

- Level I that comprises six domains detailed further in the next level. The focus of this level is on describing the relevant physician's duties and obligations.
- Level II that comprises seventeen essential competences a physician should obtain. These are further detailed at the next level, while paying special consideration to program specialization and level.
- Level III that comprises eighty learning outcomes the committee deems essential for all undergraduate medical programs in Saudi Arabia. However, this level could vary from one program to another. For example, they could vary from undergraduate to postgraduate to life-long learning.

This level is strongly connected to the nature of medical education and practice of a given specific specialty.

- Level IV comprises learning outcomes that are identified by a joint committee between the Saudi Deans and Education Evaluation Commission (EEC-HES) to set a minimum required standards to medical schools in Saudi Arabia. Special thanks to the Scientific Committee and the Joint Committee – EEC-HES & Saudi Medical Deans Sub-Committee, for their valuable contribution in executing this project.

The effective fulfillment and application of the framework will ensure

harmonization of Saudi Medical Graduates and the flexibility of medical schools and their ability to focus on some areas of the major domains, which will be later reflected in the National Saudi Medical Licensing Exam and progress tests.

### **Why SaudiMed?**

In Saudi Arabia, a national call to define the competencies of medical graduates has been given a higher priority with the expansion of medical education in the KSA. This article describes the development of a competency-based framework for the Kingdom. Initial work to develop a national consensus amongst Saudi stakeholders for the vision of the ‘Saudi Future Doctor’ and the essential learning outcomes for medical schools was conducted between 2005 and 2007. This concurred with a regional move to define the ‘Learning Outcomes’ for the undergraduate medical programs in the Arabian Gulf countries by the Gulf Cooperation Council Medical Colleges Deans’ Committee (GCCMCD 2005). The aim was to provide a means of guaranteeing minimum standards in undergraduate medical education. In 2009, the newly established Committee of Deans of Medical Schools in the Kingdom launched a taskforce with the remit of developing a national competency framework for Saudi doctors. At the same time, the NCAAA 2010 developed a draft for the ‘Learning Outcomes for Bachelor Degree Programs in Medicine’. Recently NCAAA adopted the SaudiMED framework as learning outcomes for all medical graduates.

The rationale behind shifting to SaudiMED can be summarized as:

- The call for alignment of the medical curricula with defined graduate profile (SaudiMed).
- New teaching and assessment techniques are becoming of interest to medical schools in order to support the integration.
- The publication of the Global Consensus on social accountability in medical education.
- Weaknesses in the curriculum in relation to the NCAAA standards.
- Managerial difficulties, large numbers of courses
- Accreditation requirements (standards, NQF)
- Recommendation of self-study report.



## Program Study Plan

### First year

Level	Course Code	Course Title	Pre-Requisite Courses	Credit Hours
Level 1	1606101	English-1	----	3
	1101102	Physics	----	3
	1102102	Chemistry	----	3
	1601101	Islamic Culture -1	----	2
	1608102	Health & Fitness	----	1
Level 2	1606102	English-2	----	3
	1105102	Computer Skills	----	3
	1607101	Communication Skills	----	2
	1602101	Arabic Language	----	2
	xxxxx	Free course- 1	----	2
Level 3	1210131	Medical Terminology	----	2
	1104102	Mathematics	----	3
	1103102	Biology	----	3
	1601201	Islamic Culture-2	----	2
	xxxxx	Free course -2	----	2

### Second year

Level	Course Code	Course Title	Pre-Requisite Courses	Credit Hours
Level 4	1207221	Cells & Tissues	Pass 1 <sup>st</sup> year	2
	1207211	Anatomy-1	Pass 1 <sup>st</sup> year	5
	1203211	Physiology	Pass 1 <sup>st</sup> year	3
	1601XX	*Elective Islamic-1	1601201	2
Level 5	1211211	Biochemistry-1	Pass 1 <sup>st</sup> year	5
	1207213	Anatomy-2	Pass 1 <sup>st</sup> year	2
	1207212	Embryology	Pass 1 <sup>st</sup> year	1
	1204211	Pathology	1207221	4
Level 6	1212221	Parasitology	Pass 1 <sup>st</sup> year	2
	1211212	Biochemistry-2	1211211	3
	1212211	Microbiology	Pass 1 <sup>st</sup> year	4
	1208213	Pharmacology	Pass 1 <sup>st</sup> year	3

### Third year

Level	Course Code	Course Title	Pre-Requisite Courses	Credit Hours
Level 7	1200301	Musculo-skeletal System	1207211	5
	1200302	Immune, Blood and Lymphatic System	1212211	4
	1200303	Cardiovascular System	1203211	3
Level 8	1200304	Respiratory System	----- --	3
	1200306	Endocrine System	1203211	4
	1200308	Gastrointestinal System	1207211	5
Level 9	1200305	Urinary System	1203211	3
	1200307	Reproductive System	1204211	3
	1200309	Nervous System & Special Senses	1203211	6

### Fourth year

Level	Course Code	Course Title	Pre-Requisite Courses	Credit Hours
Level 10	1201411	Internal Medicine-1	Pass 3 <sup>rd</sup> year	7
	1200401	Medical Ethics	Pass 3 <sup>rd</sup> year	1
	1200402	Forensic Medicine	Pass 3 <sup>rd</sup> year	2
	1601XXX	*Elective Islamic2	1601201	2
*The student should choose one of the following courses; Islamic Culture - 5 (1601401) or Islamic Culture-6 (1601402)				
Level 11	1202411	Surgery- 1	Pass 3 <sup>rd</sup> year	7
	1200403	Radiology	Pass 3 <sup>rd</sup> year	2
	1200404	Laboratory Medicine	Pass 3 <sup>rd</sup> year	2
		*Elective specialization-1	Pass 3 <sup>rd</sup> year	1
*The student should choose one of the following courses; Diagnostic surgical Pathology (1204411) or Medical Genetics (1211411)				
Level 12	1210411	Community Medicine	Pass 3 <sup>rd</sup> year	5
	1202421	Ophthalmology	Pass 3 <sup>rd</sup> year	3
	1205411	ENT	Pass 3 <sup>rd</sup> year	3
	1208411	Complementary Medicine	Pass 3 <sup>rd</sup> year	1

## Fifth year

Level	Course Code	Course Title	Pre-Requisite Courses	Credit Hours
Level 13	1206511	Pediatrics	1201411	12
Level 14	1209511	Obstetrics & Gynecology	1202411	10
	1202541	Urology	1202411	2
Level 15	1202531	Orthopedics	1202411	4
	1201531	Neurology	1201411	3
	1201521	Dermatology	1201411	2
	1200502	Emergency medicine	1201411 1202411	2
	1200501	Anesthesia	1202411	1

## Sixth year

Level	Course Code	Course Title	Pre-Requisite Courses	Credit Hours
Level 16	1201611	Internal Medicine-2	1201411	12
Level 17	1202611	Surgery - 2	1202411	12
Level 18	1201641	Psychiatry	1201411	4
	1210691	Medical Research	1210411	2
	1210611	Family Medicine	1210411 1201411 1202411	5
	1200601	Patient Safety	1201411 1202411	1

## Teaching & Learning strategies and Methods

### Introduction

Implementation of curriculum involved many instructional strategies and methods.

- Educational strategies involve both:
  - Contents: refer to specific materials to be included in the curriculum
  - Methods: are the ways in which the content presented.
  
- Adopted strategies based on principles and issues of teaching and learning
  - Teaching is what educators do, but Learning: is what happens within the learners.
  - Teaching and Learning theories.
  - Learning style: how can the students learn?
  - Learning objectives/outcomes
  - Use multiple educational methods
  - Choose educational methods that are feasible in term of resources.
  
- Determination of the content: Based on:
  - Learning outcomes/Objective
  - The amount of materials: It should not be too little to lack substance, or too much to overwhelm the learners.
  - Materials should be presented in chronological manner

### The major instructional strategies

- **Direct Instruction:** is highly teacher-directed and is among the most commonly used. This strategy is effective for providing information or developing step-by-step skills. It also works well for introducing other teaching methods, or actively involving students in knowledge construction. Example: Lecture (L), Drill & Practice (P), and Demonstrations.

Northern Border medical program *lecturing* is a mix between 3 models:

- (1) The Classical—in which a lecture is divided into broad areas and then subdivided. This is the easiest method of structuring a lecture and mainly teacher centered and more applied in the early years of the program for introduction of knowledge.
- (2) The Problem Centered—in which a problem is outlined, and various solutions are offered. Handled well, this method can play on the curiosity or clinical interests of the students.
- (3) The Sequential—in which a problem or question is presented and followed by a chain of reasoning which leads to a solution or conclusion. It is easy to lose the

students' attention when using this method so the use

- **Indirect Instruction:** is mainly student-centered, although the two strategies can complement each other. Possible Methods include: Flipped class room.

A *flipped classroom* is an instructional strategy and a type of blended learning, which aims to increase student engagement and learning by having pupils complete readings at home and work on live problem-solving during class time. This pedagogical style moves activities, including those that may have traditionally been considered homework, into the classroom. With a flipped classroom, students watch online lectures, collaborate in online discussions, or carry out research at home, while actively engaging concepts in the classroom, with a mentor's guidance.

- **Interactive instruction:** is relies heavily on discussion and sharing among participants. Students can learn from peers and teachers to develop social skills and abilities, to organize their thoughts, and to develop rational arguments. Possible Methods: (Small group teaching methods) as: Problem- based learning (PBL), Tutorials (T), Student-led seminar (S), workshops, Case presentation (CP), and Laboratory Groups

In *problem based learning* sessions, Problem/scenario triggers the interactive discussion among the small group. Students discuss and find solutions by argumentation. Clinical reasoning focuses the history, examination data and investigations as well as procedures required to reach the correct diagnosis in an efficient manner.

*Seminars* are group or personal assignment which build the skills for student interaction, team formation with new knowledge acquisition, commitment, task completion, presentation skills as well as augmentation and discussions skills.

Tutorial can be large or small group activity that encourages students to focus on a topic and contribute to the free flow of ideas. A pre reading material or clinical case is provided as a trigger for open discussion with minimal interaction of facilitators during the task solving, at the end there is concluding interactive discussion with the facilitator to assess the students' performance and knowledge acquisition.

*Laboratory practical* are mix of direct instruction, demonstrations as well as cooperative approach with interaction between the student and the student and between the student and the teacher is made in which the explanation is carried out by the

specialized faculty member, and then the students practice the skill under the supervision of the specialist. It may be through the experience of gaining skills. Facilitated learning through models, anatomical specimens and cadavers, samples, and microscopes

- **Experiential learning:** is inductive, learner-centered, and activity oriented. Personalized reflection about an experience and the formulation of plans to apply learning to other contexts are critical factors in effective experiential learning. Possible Methods include: Bedside Teaching (BST), Simulations (Sim), Field visit, and Role-playing.

**Bedside teaching** is a vital component of medical education. It is applicable to any situation where teaching is imparted in the presence of patients. In teaching in the patients' presence, learners have the opportunities to use all of their senses and learn the humanistic aspect of medicine such as role modeling, which is vital but difficult to communicate in words.

**Simulation** is a generic term that refers to an artificial representation of a real world process to achieve educational goals through experiential learning. Simulation based medical education is defined as any educational activity that utilizes simulation aides to replicate clinical scenarios. There are different types and classification of simulators and their cost vary according to the degree of their resemblance to the reality, or 'fidelity'. Simulation- based learning is expensive. However, it is cost-effective if utilized properly. Medical simulation has been found to enhance clinical competence at the undergraduate and postgraduate levels.

**Field visit** in the program is mainly implemented in the medical internship year. The student gain experience via sharing in the clinical tasks in outpatient clinics, wards round, operating heaters and on call duties under supervision from the responsible consultant or other senior clinical staff. This strategy improve the clinical knowledge and skills as well as communication with patients, their relatives and other members of the healthcare team in addition to familiarity with the healthcare system in Saudi Arabia.

**Role play** idea of role-play is that of asking someone to imagine that they are either themselves or another person in a particular situation. They are then asked to behave exactly as they feel that person would. In order for a simulation to occur the participants must accept the duties and responsibilities of their roles and functions. For the acquisition of patient-centered interviewing skills we tend to use the approach in which students play their role as a medical student so they are expected to perform as they

would in real clinical encounters. However, there are many variations on this theme. Role-play can be fully scripted (all players act from verbatim scripts) or partially scripted (players have certain prompts – often an opening line). Alternatively, one player (e.g. patient) is given a description of their role while the other (e.g. student) is provided with their task. Players can rotate through roles within a single role-play (switching) with the intention of gaining insight into other roles or perspectives or players can be substituted at various points in the role-play by observers.

**Self-Directed Learning/ Independent Learning:** It refers to the range of instructional methods which are purposefully provided to foster the development of individual student initiative, self- reliance, and self-improvement. In this educational strategy where students decide, with or without guidance, what and how they will learn. This can be done individually or through group learning, but the general concept is that students take over their learning. Possible Methods include Homework/ Assignment, and Research Projects.

## Assessment Methods

### Introduction

Assessment is the process of forming a judgment about the quality and extent of student achievement or performance, and therefore by inference a judgment about the learning itself. Assessment inevitably shapes the learning that takes place; that is, what students learn and how they learn it should reflect closely the purposes and aims of the course of study.

Assessments should be both formative and summative.

- **Formative Assessment:** is any form of assessment that will not contribute to the final grade of a student. Can be done at any point of the course, planned by the teachers, its main aim is to monitor the progress of student's learning. Feedback to the students about their performance is very crucial.
- **Summative assessment:** is any form of assessment that will contribute to the final grade of a student.

### Assessment Components

The weight for each exam component should be clearly stated in the course specification and provided to the student in advance at the beginning of the course.

- **Continuous assessment:** Reflect student participation such as contribution to class discussions and by such assignments as homework, written reports, research project, laboratory projects, preparation for tutorials and seminars etc.,
- **Quizzes and/or Mid-Course Examination:** Conducted at the mid of the course.
- **Final Exam:** Conducted at the end of the course.
- **Resit Examination:** Those who fail in the course assessment will have to appear in the resit exam for all the courses he/she failed in at the end of the same year if eligible to sit for the resit exam.



**Assessment Methods for program learning outcomes.**

Domains	
Knowledge	<ul style="list-style-type: none"> <li>Essay questions</li> <li>MCQs</li> <li>Oral questions</li> </ul>
Skills	<ul style="list-style-type: none"> <li>OSPE</li> <li>OSCE</li> <li>Short case assessment and long case assessment</li> <li>Log book</li> <li>Assignments rubric</li> <li>Case presentation checklist</li> </ul>
Competency	<ul style="list-style-type: none"> <li>Written exam</li> <li>OSCE</li> <li>Assignments rubric</li> <li>PBL checklist</li> <li>Continuous assessment (Indirect method: for the student communication skills, language abilities, considering responsibilities, respecting deadlines, and abilities to use the IT services)</li> <li>Short case assessment and long case assessment</li> <li>Case presentation checklist</li> <li>Group assignments</li> <li>PBL checklist</li> <li>Project checklist</li> </ul>

## **Section II: Program courses**

**First Year**

**(Levels 1-3)**

Level	Courses Description
Level 1	<p>Course Code: 1601101            Course Name: Islamic Culture -1            Credit hours: 2</p> <p>Course description:            This course gives a general introduction to Islamic culture, its concept, sources, and characteristics, the achievements of Islamic civilization and its impact on Western civilization. Then, it touches on the Islamic faith, its concept, its pillars and its contradictions, and the most important contemporary cultural challenges. Then, it concludes by mentioning the most prominent purposes of Sharia, the concept of worship, its importance, and the wisdom of its performance.</p>
	<p>Course code: 1602101            Course Name: Arabic Language            Credit hours: 2</p> <p>Course description:            An Arabic language course (1) is concerned with developing written, functional, and creative skills of expression and editing. Therefore, it includes certain topics that focus on addressing the written problems that spread in different texts, whether at the word level or at the text level, with an explanation of the techniques of writing and its methodological steps, both in theory and in practice.</p>
	<p>Course code:1606101            Course Name: English-1            Credit hours: 3</p> <p>Course description:            The aim of this course is to help PY IEP students to achieve an English language proficiency of an Independent User of language for social interaction defined as B1 level on the Common European Framework of Reference for Languages (CEFR). It is a fifteen-week module course with 15 hours classroom instruction each week.</p>
	<p>Course code: 1104102            Course name: Mathematics</p>

Level	Courses Description
	<p>Credit hours: 3</p> <p>Course description:</p> <p>This course is intended to develop techniques of differentiation and integration and introduce students to their various applications in the life sciences such as exponential growth and decay, fertility rates, predator-prey cycles, blood flow, prenatal development and drug concentration.</p>
	<p>Course Code: 1102102</p> <p>Course name: Chemistry</p> <p>Credit hours:3</p> <p>Course description:</p> <p>Clarify the role and importance of health and physical activity in the quality of life of the individual and society through the study of physical fitness and its components</p> <p>Associated with health and skill and treat the most important problems of modern life represented by psychological pressures and maintaining an ideal body</p> <p>Methods of treatment and prevention of obesity, knowledge of the basic principles of first aid, and how to prevent addiction and problems</p> <p>Women's health sleep strikes</p>
	<p>Coursecode:1105102</p> <p>Course name: Computer Skills</p> <p>Credit hour: 3</p> <p>Course description:</p> <p>The course is specifically designed to introduce students of the health care pertinent studies an overview of computer science from a perspective of which students can appreciate its relevance and application in the health care industry. This survey approach provides mainly a practical and realistic understanding of the entire field in addition to equipping the students with required skills to effectively utilize computers in a professional manner throughout their studies and futuristic research endeavors. It starts by shedding light on the history of computer application in the health care turf with the fundamentals of basic knowledge and skills required to operate</p>

Level	Courses Description
	<p>computers and their components and how to effectively log onto and utilize the Internet in addition to understanding concepts of information security and regulatory laws and code of ethics regarding the health care industry. The course then progresses to the contemporary applications and associated issues of information systems and technology in the Health care industry through a variety of topics. Finally, the course advances to discussing the Use of Computers and IT to Advance Health Care, and future dependencies and Growth areas.</p> <p>Course code: xxxxx  Course name: Free course- 1  Credit hours: 2</p> <p>Course description:  This course is chosen by student from any running 2 credit hours course in the university</p>
Level 2	<p>Course Code:1601201  Course name: Islamic Culture-2  Credit hours: 2</p> <p>Course description</p> <p>Introducing the concept of the Prophet’s biography and its sources, the first stages of his (peace be upon him) life and mission, events and facts from the Meccan and civil eras, the first invasions, his illness and death, (may God bless him and grant him peace) and his rights (may God bless him and grant him peace) over his nation.</p> <p>Course code: 1606102  Course Name: English-2  Credit hours: 3</p> <p>Course description:  This course is a continuation of the English I, 1001 101 for the Special Faculties. It aims at enabling the PY students to reach an English language proficiency of an independent user of language defined as B2+ level in the Common European Framework of Languages (CEFR). It is a fifteen-week module course with 20 hours of classroom instruction each week.</p>

Level	Courses Description
	<p>Course code: 1103102  Course Name: Biology  Credit hours: 3</p> <p>Course description:  Introduction to Biology, the core themes of Biology, Chemical basis of life, Organic Biological Molecules of Cells, Cell Structure and function, Animal Tissues - Biodiversity (Bacteria - Archea - Protists - Fungi - Plants - Animals), Nutrition and Digestive system, Respiratory system, Circulatory system, Excretory system, Genital system and Reproduction, Genetics, Selective topics in Medical Biology (Parasitology - Immunology - Medical Microbiology - Medicinal plants)</p>
	<p>Course code: 1101102  Course name: Physics  Credit hours: 3</p> <p>Course description:  Study of units and dimensions, vectors and their properties. Gravitational force, Newton's laws. Torque and condition of equilibrium, Class of levers and examples of levers in human body. Properties of mechanical waves (Sound), Intensity and loudness, sound frequencies classification, Doppler effect, Human Ear, Ultrasound Applications. Light wave, Optical Instruments, Eye and correcting vision problems Eye. Interaction of radiation with matter, RBE and LET, Isotopes, Types of decay, Laws and Definitions in Radioactivity. Bioelectricity, Central Nervous System, Neurons, Measurements of Membrane potential, The Action Potential, Sodium-Potassium Pump, Measurement of action potential activity.</p>
	<p>Course code: 1607101  Course name: Communication Skills  Credit hours: 2</p> <p>Course description:  Communication skills course deals with concepts and theories in the field of human communication, in addition to basic skills in the field of communication with self and others and to enhance their practice in his daily and practical life using methods Seriousness depends on varied and effective training and assessment. Therefore, the course is designed to be a training package for the student, considering the choice of tools that increase student</p>

Level	Courses Description
	<p>understanding by using appropriate illustrations, developing exercises, and enriching applications of the subject and a measure of the student's mastery of skills Essential Which are the components required for successful and effective communication.</p>
	<p>Course code:1608102            Course name: Health &amp; Fitness            Credit hours: 1</p> <p>Course description:            Clarify the role and importance of health and physical activity in the quality of life of the individual and society through the study of physical fitness and its components Associated with health and skill and treat the most important problems of modern life represented by psychological pressures and maintaining an ideal body Methods of treatment and prevention of obesity, knowledge of the basic principles of first aid, and how to prevent addiction and the women's health problems.</p>
	<p>Course code: 1210131            Course name: Medical Terminology            Credit hours: 2</p> <p>Course description:            The course focuses on basic medical term structure, organization of the body, combining forms, suffixes, prefixes, practical application to use medical terms, how to write medical report and how to perform medical research. The course discusses an overview on the medical school curriculum, the curriculum map, the three phases of the curriculum and the importance of the study guide, discussing the principles of assessment, their different tools, grading system and the principles of giving and receiving feedback. Explaining the different learning styles, discussing the importance of study plan and time management, identifying the concepts of long-life learner, self-directed learning, and students' centered learning. Outline the concepts of small group learning, PBL and teamwork. Defining medical professionalism; interpret what are the contributors and requirements to professionalism.</p>
	<p>Course code: xxxxx            Course name: Free course -2            Credit hours: 2</p>



Level	Courses Description
	Course description: This course is chosen by student from any running 2 credit hours course in the university

**Second Year**  
**(Levels 4-6)**

Level	Course Description
	<p>Course code:1207221  Course name: Cells &amp; Tissues  Credit hours: 2</p> <p>Course description:  At the start, the course describes different types of micro-techniques and how to use light microscope. The course describes the electron microscopic structure and functions of cell membrane, different types of cell organelles and cell inclusions. It illustrates the contents of the nucleus in addition to chromosomal study. The course demonstrates the microscopic structure of different types and sites of epithelium. It illustrates the types, site sand function of connective tissue. The course describes light &amp; electron microscopic structure of muscular tissues. It discusses the structure and functions of nervous tissue. Finally, the course describes structure and function of skin.</p>
Level 3	<p>Course code: 1207211  Course Name: Anatomy-1  Credit hours: 5</p> <p>Course description:  At the start, the course describes the meaning of the anatomy, the anatomical position and anatomical terms. The course describes the different parts of the human body (upper limb, thorax, abdomen, pelvis and lower limb). It illustrates the structures and contents of the every part of the human body. The course demonstrates the bones, muscles, nerves and vessels (arteries, veins and lymphatic vessels) present in the different parts of the body. It illustrates the blood supply and lymphatic drainage and nerve supply of the different parts of the body with its clinical importance and application of the anatomical knowledge in the clinical setting</p>
	<p>Course code: 1207212  Course name: Embryology  Credit hours: 1</p> <p>Course description:  It is designed to provide the undergraduate students with a foundation in</p>

Level	Course Description
	<p>human embryonic and fetal development from fertilization to birth. This course focuses on the morphological changes that take place during the process of development. Consideration will also be given to congenital anomalies.</p>
	<p>Course code: 1211211  Course name: Biochemistry-1  Credit hours:5</p> <p>Course description:  The course focuses on the structure and biological functions of carbohydrates, proteins, nucleotides, vitamins, enzymes, isozymes, and cell membranes. The course discusses the regulation and inhibition of enzyme activities and diseases produced by vitamin deficiencies. The course illustrates the structure and function of nucleic acids and different steps of DNA replication and repair, transcription, genetic code, mutation, protein biosynthesis, regulation of gene expression, and recombinant DNA technologies. Finally, the course describes the meaning of bioenergetics, oxidative phosphorylation, electron transport chain and its inhibitors, and mechanism of action of uncouplers.</p>
	<p>Course code:1203211  Course Name: Physiology  Credit hours: 3</p> <p>Course description:  During this course, the student will utilize the basic science literature of cell and tissues to identify the normal functioning of human body systems, cell functioning, transport across the membrane, these will help student to recognize the main functions of different organ systems of human body. The student will apply knowledge and skill in correlation of their functioning of body systems which will enable the student to develop concepts and sufficient understanding of the subject to be able to pursue post-graduate studies and continuing medical education.</p>
	<p>1601XX  *Elective Islamic-1  2  Islamic culture 3</p>

Level	Course Description
	<p>Course Description: Introducing the concept of medical jurisprudence, explaining its importance, its sources, the ruling on medication and its guidance, may God's prayers and peace be upon him, in treating himself and his policy, the most important medicines that were mentioned in the text, the rule of pharmacy and its rulings, patient rulings, general jurisprudential rules and legal purposes related to medical rulings, their meanings and most important applications, and the rulings of permission Medical, medical liability, its types, obligations, and deficiencies, provisions for contraception and its regulation, the most important contemporary medical issues, provisions related to AIDS, human cloning and organ transplantation.</p> <p>Islamic Culture 4</p> <p>Course description: Introducing the concept of the family in the Muslim society, clarifying its status and importance, and the foundations on which it is based, strengthening the values and principles on which it is based, discussing the most important family problems, and offering appropriate solutions to them, while highlighting the wisdom of legislation in each unit of this course.</p>
Level 4	<p>Course code: 1207213 Course name: Anatomy-2 Credit hour: 2</p> <p>Course description: The course focuses on the anatomical structures of the head and neck. The course discusses different structures of each part such as bones, skin, fascia, muscles, nerves and blood vessels and the application of the anatomical knowledge in the clinical study.</p>
	<p>Course code:1211212 Course name: Biochemistry-2 Credit hours: 3</p> <p>Course description: The course focuses on the different metabolic pathways of carbohydrates,</p>

Level	Course Description
	<p>proteins, lipids, and nucleotides. The course discusses the regulation of these metabolic pathways, either the anabolic or the catabolic one, and their integration in different conditions. The course illustrates the related energetics (i.e. calculations of energy gain or loss) to these metabolic pathways. Finally, the course relates the derangement of these metabolic pathways of the different macronutrients to several acquired or genetic disorders.</p>
	<p>Course code: 1204211  Course name: Pathology  Credit hours: 4</p> <p>Course description:  This course is intended to enhance the comprehension of students regarding the etiological factors and pathogenesis of diseases. The student will learn to apply the knowledge of basic sciences to interpret clinical and morphological changes. The student will understand the mechanisms of disease processes, as manifested by morphologic (gross, microscopic, and ultra-structural) changes in correlation to etiological factors, clinical features, and complications of diseases. The student will be able to describe the basic morphologic changes of various disease processes and formulate differential diagnosis using morphologic appearance. The student will develop concepts and sufficient understanding of the pathologic basis of various disease processes, which would enable him to pursue post-graduate studies, and continuing medical education.</p>
	<p>Course code: 1212211  Course name: Microbiology  Credit hour:4</p> <p>Course description:  The course focuses on the structure and morphology of bacteria, virus, and fungi. The course discusses the epidemiology, pathogenesis, diseases, and prevention of various disease caused by microorganisms. The course illustrates structure and laboratory diagnosis of various infections caused by bacteria, viruses, and fungi. The student will apply knowledge and skill in correlation of the microorganism and disease produced by them which will enable the student to develop concepts and sufficient understanding of</p>

Level	Course Description
	<p>the subject to be able to pursue post-graduate studies and continuing medical education.</p>
	<p>1208213 Pharmacology 3</p> <p>Course description: During this course, the student will be familiar with different groups of medications, their indications, pharmacodynamics, pharmacokinetic, drug interactions, adverse drug reactions, contraindications and percussions; thereby the student will utilize the basic science literature of pharmacology to be able to prescribe medications rationally, communicate to the patients effectively, promotes the concept of compliance, counsel the patient about their medication use, and participate in patient and community education.</p>
	<p>Course code: 1212221 Course name: Parasitology Credit hours: 2</p> <p>Course description: This course is intended to help the students to gain the basic knowledge and skills to deal with Medical Parasitology and Medical Entomology in the Kingdom of Saudi Arabia, therefore, should not be restricted only to endemic diseases but must be broad-based. It should include a reasonable amount of knowledge of the fundamental principles and factors which operate in the acquisition, establishment, and maintenance of different parasitic diseases. Furthermore, knowledge of the parasitic diseases prevalent in neighboring countries and to meet these diverse needs and conditions. The course given to medical students will emphasize several aspects of parasites (Helminthology, Protozoology, and Entomology) comprising: Geographical distribution, morphology, life cycle, pathogenesis, clinical picture, complication, diagnosis, treatment, prevention, and control. The student should be able to deal with different Parasitic diseases and their management.</p>

**Third Year**  
**(Levels 7-9)**



Level	Course Description
<b>Level 5</b>	<p>Course code:1200301  Course name: Musculo-skeletal System  Credit hours: 5</p> <p>Course description:  This course is intended to help the students to gain the basic knowledge and skills about the normal structure, function and pathological conditions of the musculoskeletal system. Beside the scientific knowledge and technical skills gained, the student should be able to perform a physical examination and know the principles of the common health problems associated with the musculoskeletal system. Student should be able to deal with these common health problems and outline their management</p>
	<p>Course code: 1200302  Course name: Immune, Blood and Lymphatic System  Credit hours: 4</p> <p>Course description:  This course is intended to help the students to gain the basic knowledge and skills about the normal structure, function and pathological conditions of Immunology, Blood and Lymphatic Systems. Beside the scientific knowledge and technical skills gained, the student should be able to perform a physical examination and know the principles of the common health problems associated with the Immunology, Blood and Lymphatic Systems.  Student should be able to deal with these common health problems and outline their management.</p>
	<p>Course code: 1200303  Course name: Cardiovascular System  Credit hours: 3</p> <p>Course description:  This course is intended to help the students to gain the basic knowledge and skills about the normal structure, function and pathological conditions of the cardiovascular system. Beside the scientific knowledge and technical skills gained, the student should be able to perform a physical examination and know the principles of the common health problems associated with the cardiovascular system. Student should be able to deal with these common health problems and Outline their management.</p>

Level	Course Description
	<p>Course code: 1200304  Course name: Respiratory System  Credit hours: 3</p> <p>Course description:  This course is intended to help the students to gain the basic knowledge and skills about the normal structure, function and pathological conditions of the Respiratory system. Beside the scientific knowledge and technical skills gained, the student should be able to perform a physical examination and know the principles of the common health problems associated with the Respiratory system. Student should be able to deal with these common health problems and Outline their management.</p> <hr/> <p>Course code: 1200305  Course Name: Urinary System  Credit hours: 3</p> <p>Course objectives:  Course is offered in the 5<sup>th</sup> semester and involves study of gross and microscopic structure along with developmental aspects of Urinary system. Focus is given to metabolic and functional aspects of Urinary System with regards to formation of Urine. Effort will be done for application of the acquired knowledge in interpretation of management of abnormal clinical pathological conditions of urinary system.</p>
<b>Level 6</b>	<p>Course code: 1200306  Course name: Endocrine System  Credit hours: 4</p> <p>Course description:  This course is intended to help the students to gain the basic knowledge and skills about the normal structure, function, and pathological conditions of the endocrine system. Beside the scientific knowledge and technical skills gained, the student should be able to perform a physical examination and know the principles of the common health problems associated with the endocrine system. Student should be able to deal with these common health problems and outline their management.</p> <hr/> <p>Course code: 1200307  Course name: Reproductive System</p>

Level	Course Description
	<p>Credit hours: 3</p> <p>Course description:  This course is intended to help the students to gain the basic knowledge and skills about the normal structure, function, and pathological conditions of the reproductive system. Beside the scientific knowledge and technical skills gained, the student should be able to perform a physical examination and know the principles of the common health problems associated with the reproductive system. Student should be able to deal with these common health problems and outline their management.</p>
	<p>Course code: 1200308  Course name: Gastrointestinal System  Credit hours: 5</p> <p>Course description:  This course is intended to help the students to gain the basic knowledge and skills about the normal structure, function, and pathological conditions of the gastrointestinal systems. Beside the scientific knowledge and technical skills gained, the student should be able to perform a physical examination and know the principles of the common health problems associated with the gastrointestinal system. Student should be able to deal with these common health problems and outline their management.</p>
	<p>Course code: 1200309  Course name: Nervous System &amp; Special Senses  Credit hours: 6</p> <p>Course description:  This course has been designed to help the students to gain the basic knowledge and skills about the normal structure, function , biochemical activity and pathological conditions of the nervous system, eye and ear. Beside the scientific knowledge and technical skills gained during the course, the student will be able to perform a physical examination and know the principles of the common health problems associated with the nervous system, eye and ear. The course also contains an overview of the development of the nervous system, eye and ear.</p>

**Fourth Year**  
**(Levels 10-12)**

Level	Course Description
Level 7	<p>Course code: 1201411  Course name: Internal Medicine-1  Credit hours: 7</p> <p>Course description:  This course is intended to help the students to gain the basic skills in internal medicine so that by the end of this course the student will be able to list causes of common medical diseases related to different medical subspecialties, in various adult age groups, interpret the knowledge gained from different theoretical activities to the actual medical problems of patients in the hospital, show the ability to work in a group in the clinical setting to conduct specific clinical assessment task, .demonstrate the ability of using communication skills in dealing with patients, their relatives and medical staff to solve the different medical problems and perform proper and comprehensive history and physical examination for most of the body systems especially cardiovascular, respiratory, gastrointestinal, urinary and endocrine systems.</p>
	<p>Course code: 1202411  Course name: Surgery- 1  Credit hours: 7</p> <p>Course description:  This course is intended to help the students to gain the basic skills in general surgery so that by the end of this course the student will be able to describe patterns of common surgical diseases, in various adult age groups, and recognize urgent problems and emergency and critical conditions in the area. Also student will be able to take full surgical history, with appropriate sequence and comprehensiveness and carry out the general and systemic examination in the appropriate manner, sequence and comprehensiveness relevant to the surgical problem and choose the most appropriate investigation as well as plan for management of the common surgical problems</p>
	<p>Course code:1200401  Course name: Medical Ethics  Credit hours: 1</p> <p>Course description:  This course is intended to help the students to gain the basic knowledge and skills to deal with medical situations and problems with ethical rules and regulations which is governed by our religion (Islam)and other humanitarian ethical problems according to their believes and lows . The course is complementary to what the student has learned during the study of medicine. Beside the</p>

Level	Course Description
	<p>scientific knowledge and technical skills gained the student should be able to know the principles of medical ethics especially Islamic perspective of different issues as well as knowledge about legal regulations in the Kingdom of Saudi Arabia. Student should be able to deal with different ethical problems with patients, colleagues and other medical professionals</p> <hr/> <p>Course code: 1204411 or 1211411  Course name: Elective specialization-1  Credit hours: 1</p> <p>Diagnostic Surgical Pathology (1204411)</p> <p><b>Course description:</b>  This course is intended to enhance the comprehension of students regarding the various processes and procedures involved in the cytopathological and histopathological evaluation of different types of specimens from the patients for the diagnosis. The student would learn the special precautions for the preparation of patients and the limitations of procedures. The student will be able to apply his knowledge for the proper dispatchment of cytopathological and histopathological specimens in appropriate preservatives and will observe the specific time lines for certain specific type of specimens for the appropriate processing which could affect the diagnostic results. In this course, there is hands on and eyes on training of various techniques used for the diagnosis of cancer of different organs of the human body.  Student should be able to deal with patients, colleagues and other medical professionals regarding different surgical diagnostic problems. The student will develop concepts and sufficient understanding of the diagnostic pathological processes, which would enable him to pursue post-graduate studies, and continuing medical education.</p> <p>Medical Genetics (1211411)</p> <p><b>Course description:</b>  This course is intended to help the students to gain the basic knowledge about chromosome structure, organization and function. The course discusses the patterns of inheritance and explains the types of mutations and their effect. The course illustrates clinical features of common chromosomal abnormalities and describes cytogenetic diagnostic techniques and their applications to genetic disorders. The course focuses on how constitutional and acquired genetic alterations can lead to the development of malignant neoplasms and the course also, summarize conventional approaches for treatment of genetic diseases and the general status of gene-based therapies</p> <hr/> <p>Course code: 1601XXX  Course name: Elective Islamic2  Credit hours: 2</p> <p>Islamic culture-5 (1601401 )  The course deals with the concept of ethics and the profession and their status, and the conditions of the profession. It presents examples of ethics, including: honesty, honesty,</p>

Level	Course Description
	<p>sincerity, chastity, justice, good handling, cooperation, initiative, efficiency and mastery, management ethics, professional ethics in Islamic civilization, means of consolidating professional ethics, and legal violations in the profession.</p> <p>Islamic culture -6 (1601402) Introducing the concept of development, its characteristics, the characteristics of women and their relationship to their developmental role, the role of women in spiritual and personal development, economic development and its obstacles, and the Kingdom's efforts to support women's developmental role.</p>
Level 8	<p>Course code: 1210411 Course name: Community Medicine Credit hours: 5</p> <p>Course description: This six week's course during the fourth medical year is designed to deliver the learning objectives. The course will contain topics from all disciplines of community medicine namely; epidemiology, biostatistics, environmental and health administration, disease prevention and health promotion.</p> <hr/> <p>Course code:1202421 Course name: Ophthalmology Credit hours:3</p> <p>Course description : It is a course for teaching basic skills of ophthalmology with specific teaching methodology which include lectures, tutorials, problem based learning scenarios, case presentations, seminars, skills lab., clinical rounds and OR (operation room) teaching sessions in the hospital to master history taking and physical examination techniques. The course runs for 3 weeks to complete 45contact hours (3 credit hours) and the students are assessed using written, quiz, OSPE and oral examinations.</p> <hr/> <p>Course code: 1205411 Course name: ENT Credit hours: 3</p> <p>Course description : Course is given to Students at Level 1 &amp;2 in 4th year. At each level(term) all attended students subdivided into 3 subgroups. Each group will attend the whole course lasting for 3weeks duration. The course involves: study of brief anatomy and functions of different parts of ear, nose and throat. Discussion of disorders of ear, nose and throat-mainly inflammatory and traumatic types- including; definition, etiology, pathology, pathogenesis, clinical picture (symptoms and signs), investigations, treatments and complications. Also students will take a brief knowledge</p>

Level	Course Description
	<p>about some related topics in audiology, phoniatrics and radiology. At clinical practice, all students attend( in small groups; 2-4 persons) clinical rounds at outpatient clinics, bedside teaching and operative rooms. discussing history taking, how to do clinical examination to a patient, investigation required, prescribed medication or required operation. 4 case scenarios will discussed at problem solving learning(PSL), 2 sessions for each case. There are also 2 seminars for the most two important topics(trauma in ENT and epistaxis).</p> <p>Course code: 1200403  Course name: Radiology  Credit hours: 2</p> <p>Course description :</p> <p>This course is designed to give knowledge to the students about basic principles of radiological images, basic radiological anatomy and descriptive terms of different modality in normal and some common disease and to develop skills to correlate clinical and radiological findings with the help of lectures, tutorials, film viewing sessions and problem based learning scenarios. The course run for 2 weeks to complete 50 contact hours (3 credit hours) and the students are assessed using written and OSPE exams.</p> <p>Course code: 1200404  Course name: Laboratory Medicine  Credit hours: 2</p> <p>Course description :</p> <p>This course is intended to enhance the capability of students regarding the etiological factors, pathogenesis and signs and symptoms of diseases. The student will learn to apply the knowledge of clinical information to request laboratory tests required for each specific disease. The student will understand the mechanisms and principles of laboratory tests from hematological, chemical, microbiological and immunological point of view. The student will be able to interpret the laboratory reports and match them with clinical condition of the patient. The student will develop concepts and sufficient understanding of the laboratory tests and reports of various disease processes, which would enable him to pursue post-graduate studies, and continuing medical education.</p> <p>Course code: 1208411  Course name: Complementary Medicine  Credit hours: 1</p> <p>Course description :</p> <p>During this course, the student will be familiar with common CAM modalities, their indications, and interactions with allopathic medicine. The student will utilize the basic knowledge of CAM to be able to counsel the patients about the use and interactions of different CAM modalities with their allopathic medication. The students also should be able to solve problem associated with the use of CAM products.</p> <p>Course code: 1200402</p>



Level	Course Description
	<p>Course name: Forensic Medicine Credit hours: 2</p> <p>Course description :</p> <p>Course is given to Students at semester 1 &amp;2 in 4<sup>th</sup> year and involves study of Different Types of Physical and Toxic-chemical Injuries and their interpretation in the context of Homicide, Suicide or Accidents as Causes of Deaths. Emphasis is paid to Medico legal aspects of Asphyxia and Sexual Offences. Effort is Made for the Student to Understand and recognize different Post Mortem Pathological Changes which helps in Preparation of Autopsy report. Finally, Knowledge of Different Forensic Science and forensic Toxicology Laboratory Techniques is imparted to Students for solving cases related to Identification and Paternity</p>

**Fifth Year**  
**(Levels 13-15)**

Level	Course Description
Level 9	<p>Course code: 1206511 Course name: Pediatrics Credit hours: 12</p> <p>Course description: This course is intended to help the students to gain the basic skills in pediatrics so that by the end of this course the students will be able to list causes of common medical diseases related to different pediatric subspecialties, in various pediatric age groups, interpret the knowledge gained from different theoretical activities to the actual medical problems of children in the hospital, show the ability to work in a group in the clinical setting to conduct specific clinical assessment task, demonstrate the ability of using communication skills in dealing with children, their relatives and medical staff to solve the different medical problems and perform proper and comprehensive history and physical examination for most of the body systems especially cardiovascular, respiratory, gastrointestinal, neurological, urinary and endocrine systems. Along with these the interpretation of growth charts, their nutritional status and vaccination.</p>
	<p>Course code: 1201531 Course name: Neurology Credit hours: 3</p> <p>Course description: This course is intended to help the students to gain the basic skills in neurology. So that by the end of this course the student will be able to list causes of common neurological diseases, interpret the knowledge gained from different theoretical activities to the actual medical problems of patients in the hospital, show the ability to work in a group in the clinical setting to conduct specific clinical assessment task. In addition, the student will be able to demonstrate the ability of using communication skills in dealing with patients, their relatives and medical staff to solve the different neurological problems and perform proper and comprehensive history and physical examination for most of neurological systems.</p>
	<p>Course code: 1201521 Course name: Dermatology Credit hours: 2</p> <p>Course description: This course is designed to enable the student to become acquainted with clinical presentations, etiopathogenesis and management of common skin diseases.</p>
	<p>Course code: 1200501 Course name: Anesthesia Credit hours: 1</p> <p>Course description:</p>

Level	Course Description
	<p>This course aims to develop health professionals who are competent to work in healthcare settings with skills specific to anesthesia. This course gives knowledge to the students about basic principles and ethics of Anesthesia, history taking, monitoring devices, airway and pain management. The course will include interactive lectures, tutorials and hands-on practical sessions.</p>
Level 10	<p>Course code: 1209511 Course name: Obstetrics &amp; Gynecology Credit hours: 10</p> <p>Course description: The course is about teaching the core knowledge of obstetrics and gynecology in a series of lectures, supported by a set of PBL to consolidate the clinical aspects of each topic. The bed side teaching is for history taking and clinical examination and the other clinical skills were obtained in the skill lab. The weekly tutorial was for the obstetrics emergencies. Seminars and case presentations were designed to build the students presentation and communication skills</p>
	<p>Course code: 1202531 Course name: Orthopedics Credit hours: 4</p> <p>Course description: This course is intended to help the students to gain the basic knowledge and skills to deal with orthopedics situations and problems with trauma of any type, mostly fractures. The course is complementary to what the student has learned during the study of medicine. Beside the scientific knowledge and technical skills gained the student should be able to know the principles of orthopedics. Student should be able to deal with different orthopedics problems of patients, and referral mode to colleagues and other medical professionals</p>
	<p>Course code: 1200502 Course name: Emergency medicine Credit hours: 2</p> <p>Course description: This course studies the basic emergency cases related to the different medical specialties as traumatology, surgery, and the common medical problems attending to the emergency room. The course focuses on who to diagnose the common emergency cases and how to formulate their management plans in addition to who to perform the simple life saving procedures.</p>
	<p>Course code: 1202541 Course name: Urology Credit hours: 2</p>

Level	Course Description
	<p>Course description:</p> <p>This course is intended to help the students to gain the basic knowledge and skills to deal with medical situations and problems of urology.</p> <p>The course is complementary to what the student has learned during the study of surgery -1. Beside the scientific knowledge and technical skills gained, the student should be able to know the principles of anatomy, physiology and pathology of the genito-urinary system.</p> <p>Student should be able to deal with clinical problems of patients with urological complain.</p>

**Sixth Year**  
**(Levels 16 and 18)**

Level	Courses description
	<p>Course code: 1201611  Course name: Internal Medicine-2  Credit hours: 12</p> <p>Course description:  This course is intended to help the students to gain the basic skills in internal medicine so that by the end of this course the students will be able to list causes of common medical diseases related to different medical subspecialties, in various age groups, interpret the knowledge gained from different theoretical activities to the actual medical problems of adult patients in the hospital. In addition, the student will be able to work in a group in the clinical setting to conduct specific clinical assessment task, demonstrate the ability of using communication skills in dealing with patients, their relatives and medical staff to solve the different medical problems and perform proper and comprehensive history and physical examination for most of the body systems especially cardiovascular, respiratory, gastrointestinal, neurological, urinary and endocrine systems. Along with these the interpretation of investigations and to chart out a management plan.</p>
Level 11	<p>Course code: 1201641  Course name: Psychiatry  Credit hours: 4</p> <p>Course description:  This course is intended to help the students to gain the basic skills in Psychiatry so that by the end of this course the students will be able to list causes of common psychiatric disorders, in various age groups, interpret the knowledge gained from different theoretical activities to the actual psychiatric problems of adult patients, children, geriatrics in the hospital, show the ability to work in a group in the clinical setting to conduct specific clinical assessment task, demonstrate the ability of using communication skills in dealing with patients, their relatives and medical staff to solve the different psychiatric problems and perform proper and comprehensive history taken into account Bio-psycho –Social Model and relevant physical examination . Along with these the interpretation of common psychological assessments and to chart out a management plan.</p>
	<p>Course code: 1210691  Course name: Medical Research  Credit hours: 2</p> <p>Course description:  This course is a required component of the curriculum of bachelor of Medicine and Surgery (MBBS) at Northern Border University. In this course students will learn the basic principles of medical research methodologies, biostatistics, research ethics, data sources and data management to enable them to conduct a well-designed medical research that meets national and public needs. At the end of this course students are expected to have a completed group project proposal and present it. They will be also</p>

Level	Courses description
	encouraged to complete their project and publish their results or present their work in the national and international conferences.
Level 12	<p>Course code: 1202611  Course name: Surgery - 2  Credit hours: 12</p> <p>Course description:  It is 12 weeks general surgery course which covers theoretical basis of general surgical diseases, clinical assessment of the patients who present to attached teaching MOH hospitals and learning of common surgical skills like instrument and surgical suture identification, demonstrating structural clinical tasks and principals of prescription writing.</p>
	<p>Course code: 1210611  Course name: Family Medicine  Credit hours: 5</p> <p>Course description:  This course is designed to train medical students with the skills and body of knowledge that they as physician will require in practice. This curriculum is based on an analysis of the problems seen and the skills used, by family physicians in their practice, and emphasize continuing responsibility for total health care – from the first contact and initial assessment through the ongoing care of chronic problems with stress on prevention and early recognition of disease. The Knowledge of principles and concepts of family medicine and the system of health care give added advantage of coordination of and integration of all necessary health services, (minimizing fragmentation) and the skills to manage most medical problems thereby providing cost effective healthcare.</p>
	<p>Course code: 1200601  Course name: Patient Safety  Credit hours: 1</p> <p>Course description:  Patient Safety Module aims to introduce to the students the concepts, philosophy and practicality of patients’ safety. This is a multidisciplinary course building a collaborative relationship between the students, patients, caregivers, and other health care providers. The course is an introduction to the new concept of ‘Patient Safety’ to our future physicians. It depends on inter-professional and multidisciplinary evidence based approach to patient safety. The course will include interactive lectures, hands-on practical sessions and close patient/family interaction. Student will be exposed to national laws and rules and medical law protection which will add to the professional aspect of the curriculum. Students will act as their patients’ own advocate during the Patient Safety Advocacy Project execution.</p>



### **III. Program regulations**

## Enrollment regulations

- The University Council determines, upon the proposal of the Colleges Councils and the relevant authorities of the University, the number of students who can be admitted to the program in the next academic year.
- To be admitted to the university, a new student must have the following conditions:
  1. The student must be a Saudi national, or from a Saudi mother, or the wife of the Saudi citizen who has Children from him, and we mean here in Saudi Arabia is the one who has a civil registry number issued by the circumstances
  2. Must have a high school certificate, or its equivalent from within the Kingdom or from Outside.
  3. Must not have been graduated from the high school, or its equivalent, for a period exceeding five years.
  4. Be of good conduct and morals.
  5. Be medically fit.
  6. The student should not be enrolled in a university, college or institute.
  7. The student must not have been dismissed from another university disciplinarily.
  8. Priority of admission for students with a high school certificate from within the Northern border area
  9. The student who holds a high school certificate from outside Saudi Arabia applies to the same admission requirements applied to his peers who graduated from inside Saudi Arabia.
  10. The applicant who holds a high school diploma from outside the Kingdom is required to have a high school certificate and the rest the documents are certified by the Saudi Cultural Mission in the country of graduation.
- The applicants who meet all the conditions shall be enrolled in the program in accordance with their weighted grade according to the available numbers of seats. When the available seats are filled, the next wish of the student is considered, and so on.
- $\text{Weighted marks} = 0.5 * \text{secondary school percent} + 0.25 * \text{general aptitude test} + 0.25 * \text{academic achievement test}$ .

## **Re-sit examination**

If the student failed to pass one or more course, he/she will retake a re-sit examine the date and time announced by examination unit.

If the student failed in more than 50% of the credits of the year, he/she will become ineligible to have the re-sit then repeat the failed blocks in the next year.

Prohibited students, for the reason of absence, will not be allowed to take a re-sit exam in the prohibited block and must repeat the year.

## **Progression from year to year**

For phase I and II, the only requirement is obtaining a minimum of 60% in total in a module to

be declared as pass.

For Phase III, the student must obtain:

Any student who did not fulfils the above criteria should be declared as FAIL

- o 60% in aggregate to declare as pass.
- o 60% in clinical examination
- o 50% in theory examination

جامعة الحدود الشمالية  
NORTHERN BORDER UNIVERSITY  
كلية الطب

