



Student guide

M1 2023-2024

Second term

- :Contents

- 1- Characters of O.6.U. graduates: 2- Teaching strategy in O.6.U.
- 3- -Guide lines (why P.B.L. “Problem Based Learning”) (what the student & tutor will do this term) , (modules in this term & their general objectives)
- 4- Schedule for lectures , practicals , cases (small group teaching) , skill lab , & exams
- 5- Rubrics for grading assignments and presentations
- 6- Portfolio items
- 7- Cases with objectives 8- Tutor guide for the cases 9- N.A.R.S.

- Characters of O.6.U. graduates:

- 1- Work to maintain normal health, provide primary health care and deal with common health problems in the society
- 2- Be aware of the importance of a good doctor patient relationship and work to establish and maintain it.
- 3- Follow rules of medical ethics.

- 4- Show appropriate attitudes and professionalism.
- 5- Demonstrate appropriate communication, clinical and practical skills.
- 6- Be prepared for lifelong learning.
- 7- Be able to engage in post- graduate and research studies.
- 8- Acquire basic administrative capabilities

**** ملخص إستراتيجية التعليم والتعلم بالكلية ****

1. إستراتيجية التعلم الذاتي:

أسلوب من أساليب التعلم المتطورة التي تمكن الطالب من تحصيل المعارف والمهارات معتمداً على قدرته الذاتية من مصادر التعلم المختلفة ، فيعلم نفسه بنفسه وفقاً لقدراته ولسرعته في التعلم.

2. إستراتيجية التعلم التفاعلي:

تعتمد إستراتيجية التعليم التفاعلي على أسلوب التفاعل بين الطالب والمحاضر والمادة العلمية ويمكن تطبيق هذا المفهوم من خلال عدة وسائل منها التعليم التعاوني والتعليم الإلكتروني.

أ- التعلم التعاوني:

من خلال عمل الطلاب معا في مجموعات صغيرة العدد للعمل على حل المشكلات أو دراسة حالة والمشاركة في حملات التوعية في تفاعل إيجابي متبادل يشعر فيه كل فرد أنه مسئول عن تعلمه وتعلم الآخر .

ب- التعليم الإلكتروني:

وسيلة تدعم العملية التعليمية وتحولها من طور التلقين إلى طور الإبداع والتفاعل وتنمية المهارات، حيث تعتمد على تطبيقات الحاسبات الإلكترونية وشبكات الإتصال والوسائط المتعددة في نقل المهارات والمعارف وتضم تطبيقات عبر الموقع الإلكتروني وغرف التدريس الافتراضية.

3. التدريب

- التدريب الإكلينيكي

- التدريب الميداني

- القوافل الطبية

- التدريب الصيفي بالمستشفى

- التدريب بمركز التدريب الطبي المستمر ووحدة الأبحاث الطبية المتقدمة

- التدريب بالمستشفيات بالخارج

**أساليب وطرق التعليم والتعلم

أساليب أخرى لمدرّيس التفاعلي	الأساليب الغير تقيدية	الأساليب التقيدية
البحوث وتقديم العروض العملية (أنشطة اخرى: المشاركة فى القوافل الطبية وحملات التوعية)	حل المشكلات	المحاضرات باستخدام الداتا شو Tutorial & السيمينار
	الرسومات التوضيحية وعمل بوسترات للابحاث	نماذج ومحاكاة Skill lab مشاهدة
التعلم الالكتروني	لعب الادوار	
الزيا ارت الميدانية (الوحدات الصحية - المصل واللقاح - المحرقة بالمستشفى - وحدة التعقيم)	د راسة الحالة	
التدريب الصيفى بمستشفى الجامعة وبالخارج	المناقشة فى مجموعات صغيرة	

وللتأكد من تحقيق مخرجات التعلم المستهدفة:-

يتم تقييم مستوى الطلاب بطرق متعددة تشمل:

- الامتحانات الدورية
- الامتحانات التحريرية
- حل المشكلات ودراسة الحالة
- الامتحانات العممية والاكليينكية وتطبيق نظام) OSPE - OSCE

عميد الكلية

أ.د/عمرو نديم

- **PBL Philosophy**

In a world where available information is growing exponentially, we believe that the most important thing a student needs to know is how to learn. So the main learning goals of the PBL are a framework for looking at concepts, skills, and abilities and help guide the creation of personalized student curriculum. PBL offers unique environments where students can flourish as individuals within a community of learners.

- **PBL Process**

The core of the PBL process is the tutorials that will be held once weekly beside the practical sessions and the interactive lectures. In each tutorial there will be a case scenario that is delivered to the students, where they collaborate together through the seven jumps process



to point out the possible problems present in the case and to find out the intended learning objectives need to be known through this case. In the second tutorial, they will discuss the objectives of the case after self study, and a new case will be delivered. In PBL process the role for lectures aim at clarification of complicated areas of information or to integrate different areas of information. Practical sessions and clinical skill lab are included as educational activities in BPL. They act as tools for the students to gain the needed psychomotor skills and to attain the professional attitude and behavior.

- :Student role

-The student is the center of the learning process in PBL. **Students will depend on themselves in finding out the learning objectives by brain storming in the case study session. Then they will go home and study and search in the texts or hand outs for the information of the objectives they got. Then the following session they should try to present the information they gazed and summarized to their students in an easy palatable way.** In BPL the students have to work hard, prepare themselves well for every tutorial group meeting, collaborate with their colleagues and practice team work. They also will have their reflection about the process, their colleagues and the tutor.

- :Tutors role

- The tutor will work as a facilitator more than traditional teacher who delivers all the information to the students. Tutors role is to stimulate and motivate the students to learn and to search for the information and knowledge. During the case they will guide the students and redirect them towards the intended learning objectives. The tutors share in the assessment process. Moreover, he share with the students the responsibility of setting the roles of the tutorial session.
- Tutor will divide the students into groups to work with each other.
- **The tutor will receive guide information for the objectives in each case from the departments at least one week before the case is to be discussed, he should read them and then in the discussion of the case he should see if the students had fulfilled all the needed items so as to approve their work or they need to search more for certain items and get them so as to complete their work completely or they got more or un needed items they should discard them. By the end of the cases of the module students will have their hand out covering all items needed in the objectives they searched for**
- **All staff members should have their official mails done by the beginning of the academic year so as good communication may be applicable and to facilitate uploading of their lectures every Wednesday of each week**
- In each session one of the students will be the reader (the one who reads the case) and another one will be the writer (the one who writes the objectives on the board after brain storming of the students with the tutor and collect them after that)
- In session) 1 (
- One case will be red by the students

- They make brain storming with each other and with the tutor to reach the objectives the case is talking about. They will go home to search for them and make presentation about them the coming session according to rubrics given in this guide.
- Weeks for reading of the cases and discussion of the objectives are written above each case.
- The presentation have certain rubrics the tutor try that the students should stick more and more to them each time they make the presentation
- **STUDENTS SHOULD ATTEND THE CLINICAL DISCUSSION OF THE CASE THAT WILL BE DONE IN THE LAST WEEK OF THE MODULE WITH MEMBERS OF THE DEPARTMENTS SHARING IN THE OBJECTIVES OF THE CASE, AND STUDENTS SHOULD RECORD IT.**
- At the end of each module marks will be given according to :
 - The attendance in the case sessions and the clinical case discussion
 - The presentation they showed along the module and their share in the discussions and preparation of the work needed (see professional behavior sheet included)
 - The assignment they will be given which includes presentation and they should comply completely to the presentation and assignment rubrics (included in the guide)
 - (the mark is given by the tutor and program heads after revising the assignments and discussing the students in them in the date of one of the case sessions scheduled with the students. This is to complete the mark of the portfolio for this module as shown in the assesment schedule included)
 - After the students finish the presentation in each session they will read the following case and brain storm to get the objectives that they will go home to prepare them as presentation in the coming case session and so on all the sessions
 - If the case is long its presentation by the students may take two weeks not one week to ensure that the students presented the objectives in the case in a good way
 - All students are to make their Emails in the first week and try to enter the learning management system on the moodle (<https://med@o6u.edu.eg/moodle>) so as to be able to have the on line information uploaded weekly and lectures , videos and on line formative exams as well as the grades

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Category	Scoring Criteria	Total Points	Score
Organization (% 15)	Were the main ideas presented in a clear manner?	5	
	Information is presented in a logical sequence.	5	
	Presentation appropriately cites requisite number of references.	5	
Content (% 45)	- The Introduction is attention-getting, - It lays out the problem well, - It establishes a framework for the rest of the presentation.	5	
	Technical terms are well-defined in language that is appropriate for the target audience.	5	
	The Presentation contains accurate information.	10	
	The material included is relevant to the overall message/purpose.	10	
	Appropriate amount of material is prepared, and the points made reflect well their relative importance.	10	
	There is an obvious conclusion summarizing the presentation.	5	
Presentation (% 40)	Speaker maintains good eye contact with the audience and is appropriately animated (e.g., gestures, moving around, etc.).	5	
	Speaker uses a clear, audible voice.	5	
	Delivery is poised, controlled, and smooth.	5	
	Good language skills and pronunciation are used.	5	
	Visual aids are well prepared, informative, effective, and not distracting.	5	
	Length of presentation is within the assigned time limits.	5	
	.Information was well communicated	10	
% Score	Total Points	%100	

Professional Behavior of student in the case checklist

Students Name:

Date:

End of module (Summative):

Module title: Student's Signature

.....:Tutor's Name:

Criteria	:Scale 1 and 2 is unsatisfactory, 3, 4 and 5 is satisfactory performance	Comments
<p><u>Preparation:</u> Is well prepared with relevant information, uses a variety of references and summarizes key points</p>	5 4 3 2 1	
<p><u>Critical thinking</u> Identifies the problem, analyzes problem, suggests possible solutions, helps grow learning objectives</p>	5 4 3 2 1	
<p><u>Participation</u> Participates actively, takes on turn and listens attentively</p>	5 4 3 2 1	
<p><u>Communication Skill & Group Skills</u> Respects tutor and colleagues, communicates well uses appropriate language, accepts feedback and responds appropriately. Contributes to group learning, shares information with others, demonstrates sensitivity to views and feeling of others, takes on assigned tasks willingly</p>	5 4 3 2 1	
<p><u>Presentation skills:</u> Presents the information relevant to the learning objective of the case, explains clearly the reasoning process with regard to solving the problem</p>	5 4 3 2 1	
	SATISFACTORY	UNSATISFACTORY



-The students portfolio (October 6 university - faculty of medicine - 2023 - 2024):

- The student binder for the portfolio should contain the followings:
- Binder should contain the names of the group of the students, and contact information (telephone , - emails) , their leader and names and emails of their tutor (s),
- Binder of portfolio may be either in papers or electronic.
- Students should collect the presentations the group will do along the sessions of the cases and put them in the binder of the portfolio, with the cases , CV and the needed assignments , brochures , or links for the channels as will be announced

Students SHOULD ATTEND THE CLINICAL DISCUSSION OF THE

CASE THAT WILL BE DONE EVERY WEEK ON LINE WITH MEMBERS OF THE DEPARTMENTS SHARING IN THE OBJECTIVES OF THE CASE , AND STUDENTS SHOULD RECORD IT

- Any community medical work the student completed under supervision of a staff presenting the followings:
 - Name of staff & position
 - Date
 - Site
 - Results
 - Obstacles
- Each group of students should make a channel on the you tube and put in it their presentations and summary of their manuscript or brochure work. This should be accomplished by **END OF APRIL** information about this channel should be included in the binder of portfolio.
- Conferences attended by him if present
- Visits done to clinical departments to see relevant experiments if present.
- **PORTFOLIO SHOULD BE SUBMITTED IN FULL BY FIRST WEEK OF MAY.**
- **Portfolio scoring (Rubrics for evaluating portfolios):**
 - **Each student should be rated as one of the followings :**
 - Outstanding & he will be given 95% to 100% of the portfolio mark
 - Acceptable & he will be given 70% to 75% of the portfolio mark
 - Marginal & he will be given 60% to 65% of the portfolio mark
 - Unacceptable & he will be given less than 60% of the portfolio mark

Schedule available separately

FIRST YEAR	MID MODULE	CONTINUOUS ASSESSMENT	END MODULE	OSPE
IMN 125	marks 27 electronic	10 marks total 1.5 attendance sections 1.5 attendance cases presentation 4 portfolio 3	50 marks total 40 MCQ 10 SAQs electronic	38 marks total -slides electronic and practical
IPA 125	marks 27 electronic	10 marks total 1.5 attendance sections 1.5 attendance cases presentation 4 portfolio 3	50 marks total 40 MCQ 10 SAQs electronic	38 marks total -slides electronic and practical
IPH 100	marks 22 electronic	8 marks total 1.5 attendance sections 1.5 attendance cases presentation 3 portfolio 2	40 marks total 30 MCQ 10 SAQs electronic	30 marks total -slides electronic and practical
IMP 125	marks 27 electronic micro 16 para 11	10 marks total 1.5 attendance sections 1.5 attendance cases presentation 4 portfolio 3	50 marks total 30 micro 20 para 40 MCQ 10 SAQs electronic	38 marks total 22 micro 16 para -slides electronic and practical





Cases

Cases module pathology (IPA)

Case (TWO) (brain abscess) :

A 5 years old female patient was admitted to the emergency unit suffering from severe headache, after investigation she was diagnosed to have brain abscess. As piration of pus from the abscess was done and transported to the laboratory in a special transport media. Gram stain was done and revealed gram negative bacilli. By doing culture on blood agar under aerobic condition, no growth was obtained

- Objectives (for brain storming) :

-

Cases module pharmacology (IPH)

Alzheimer's Dementia

- :Chief Complaint

"Mom has become uninterested and apathetic in the past month. She is not always cooperative with daily functions. I am moving out of state to help take care of my own grandchildren; so, my brother, Sam, is thinking about moving Mom to his house or to a nursing home. ".He will become her main caregiver

- :History of Present Illness

Norma Dale is a 74-year-old woman who presents to the geriatric care clinic for a routine visit accompanied by her daughter Ann. Norma was diagnosed with Alzheimer's disease. 6 years ago. Her initial symptoms included forgetting times and dates easily, misplacing & losing items, repeating questions & current events, inability to answer questions, & increasing difficulty with managing finances. She was initially treated with tacrine, which was eventually discontinued due to complexity of QID dosing and elevated liver enzymes. Treatment with Aricept 10 mg at bedtime has been well tolerated for the past 4 years, & Norma has been participating more actively in family and social functions. Behavioral problems have been infrequent. Since her last clinic visit, Norma began using undergarments as



extra protection for urinary incontinence. Norma lives with her daughter, Ann, who reports that this living arrangement has been tolerable. As the principal caregiver, Ann has been able to maintain a regular routine with her mother's daily activities, nutrition, & financial responsibilities. However, Ann is moving in 1 month to live closer to her own daughter to help with grandchildren & has asked her youngest unmarried brother, Sam, to help take care of their mother.

Sam has agreed to be his mother's caregiver. He lives and works across town & is not sure if he wants to move his mother into his home. There has been discussion about placing Norma in a long-term care facility. Norma displays lack of interest and apathy lately, especially when Ann & Sam are talking about her care. Ann asks about Norma's current Alzheimer's medication & her recent attitude and lack of cooperation.

- :Neurological Examination

1. Normal Motor, sensory, CNS, cerebellar, & gait. MMSE: score 16/30 (*compared to 17/30 last year & 19/30 initially*).
2. Disoriented (*to country, season, month, date, day of week*).
3. Good registration but impaired attention & very poor short-term memory (*unable to remember any of 3 items after 3 min*).
4. .Able to follow commands
5. .Displayed apathy during MMSE

- CT scan: Mild to moderate generalized cerebral atrophy

- :Assessment

1. Alzheimer's disease, stage 5 on the Global Deterioration Scale (moderate AD – early dementia).
2. Behavioral problems reported by caregiver as lack of interest, apathy, & uncooperative behavior.
3. .Occasional urinary incontinence
4. Occasional knee pain secondary to osteoarthritis; generally, well controlled with acetaminophen PRN.

Questions:





Migraine

Case 1:

In an outpatient clinic, a 31-year-old woman who is suffering from frequent migraine headaches of moderate severity; was prescribed a nasal spray that causes a selective vasoconstriction of the carotid vascular bed by stimulating 5-HT_{1D} receptors.

Questions:

Case 2:

In Emergency department, a 45-year-old woman was prescribed dihydroergotamine (DHE) + metoclopramide for severe migraine attack.

:Questions

Cases module microbiology and parasitology (IMP)

Cases in General bacteriology

Gram stain

A 10-year-old child suffering from severe headache and neck pain is brought to the emergency department .On physical examination , the patient was found to be lethargic and had stiff neck and was diagnosed as meningitis .A lumbar puncture reveals numerous neutrophils The cerebrospinal fluid (CSF) protein level was found high and the glucose level was found low:

Objectives :

Ziehl – Nelsen stain



A 50 year old man is brought to the emergency room with a cough productive of bloody sputum. The patient complains of shortness of breath. He reports having lost approximately 20 kilograms from his weight. He also complains from night sweats two to three nights a week for the past month. The patient is heavy smoker. On examination, the patient is a thin tall male. All vital signs are normal. His lung examination is notable for decreased breath sounds diffusely. Chest X ray reveals a cavity in the left upper lobe. The patient was diagnosed as having pulmonary tuberculosis.

Objectives :

Gene transfer , antibiotic resistance and nosocomial infection (hospital acquired)

An increase in **antibiotic resistance** has been observed in **gram negative bacilli** isolated from **urine** of patients in a critical care center . The same strains were isolated from hands of health care workers indicating contact transmission of the organisms . All strains **have . the same plasmid profile**

: Objectives

Pasteurization

A family routinely consumed unpasteurized milk ,several members experienced sudden onset of fever of crampy abdominal pain,fever and profuse diarrhea .*Campylobacter jejuni* ,**a Gram negative bacilli** ,were isolated and identified in all patients .

Objectives :

Parasitology Case Study:

A 40-year-old male patient complaining of abdominal pain and swelling. Clinical examination revealed a palpable mass with a thrill in the right upper quadrant of the abdomen. Ultrasonography confirmed a fluid-filled cyst in the right lobe



of the liver. Elevated liver function tests were observed. Blood picture revealed eosinophilia. The patient gave a history of contact with stray dogs.

Objectives :

Case (THREE) : (Haemothorax) :

A 17-year-old woman presented to the clinic with a history of dry cough, sore throat and mild fever. She was diagnosed to be having upper airway infection. She confirmed that she had had similar attacks in the previous 3 years. Chest X-ray revealed nearly complete replacement of the right hemithorax with a dense homogenous opacity.

The patient was then referred to the surgical clinic. Additional clinical imaging showed an impaired percussion note and diminished air entry over the right hemithorax. The chest X-ray was repeated and showed a very large, dense homogenous opacity occupying nearly 90% of the right lung. The preliminary initial diagnosis was *Echinococcus* of the lung. After a week of preparatory albendazole treatment, the patient underwent parenchyma-preserving surgery.

- Objectives (for brain storming) :

-



Case (FOUR) : (pulmonary T.B.)

A 50 years old man was brought to the emergency department with productive cough and bloody sputum. The patient complained from shortness of breath, and reported having lost 20 Kgs of his weight in a short period of time without being on any regimen to decrease weight. He also complained from night sweats two or three nights a week for the past month. The patient was heavy smoker. On examination the patient appeared thin, and tall, his vital signs were normal. His lung examination was notable for decreased breath sounds diffusely. Chest X ray revealed a cavity in the left upper lobe. The patient was diagnosed as having pulmonary T.B.

- Objectives (for brain storming) :

-



Case (FIVE) : stomach upset

A patient was admitted to the internal medicine clinic complaining from stomach upset, diarrhea, swollen abdomen cough, weakness and fatigue. Investigations revealed anemia and unexplained weight loss. The patient was diagnosed to be having hydatid cyst.

- Objectives (for brain storming) :

-

Cases module metabolism and nutrition (IMN)

Cases for the Module (IMN)

Case 1 - Gout

A 52-year-old male presented with severe pain in his wrists and right big toe, which was accompanied by inflammation and erythema of the joints. The patient had previously been diagnosed with acute gouty arthritis approximately 7 years ago, but had not experienced another acute attack since his original diagnosis. He had been taking simvastatin 40 mg nightly for hyperlipidemia for 7 years, 20 mg lisinopril daily for hypertension for 10 years, and hydrochlorothiazide 25 mg, also for

hypertension, which was recently added two months ago. The patient had been steadily gaining weight over the last few years and was now about 50 lbs overweight. He stated that he drinks about a six pack of beer every day. The PCP suggested that he discontinue taking his hydrochlorothiazide and start taking amlodipine 5 mg daily, and to take naproxen 750 mg initially, followed by 250 mg every 8 hours until the symptoms of his gouty attack subsided. The PCP also suggested that along with exercise, the patient stop drinking or, at the very least, cut down on his alcohol intake and consider beginning a low-purine diet.

- Objectives :

Case 2 – vitamin deficiency

A 12-year-old boy with a 2-month history of reduced visual acuity was referred to a corneal specialist by an ophthalmologist. He had a history of high functioning autism and iron deficiency. At age 9, he had developed right optic nerve neuropathy, which had reduced his right eye visual acuity to 6/60 and was attributed to an Epstein-Barr virus infection. There was no significant family history. Dietary history revealed a restricted diet, consisting only of hot chips and nuggets.

On presentation, the patient was short, extremely underweight and pale, with mild proximal muscle weakness. Visual examination showed only light perception in the right eye and 1/60 in the left eye. A relative afferent pupillary defect (RAPD) was noted in the right eye. Supratemporal field loss was noted in the left eye. Slit lamp examination revealed bilateral corneal and conjunctival keratinisation normal anterior and posterior chambers, and clear lenses. He had marked pallor of the right optic nerve disc and temporal pallor of the left disc.

Investigations:

Systemic investigation revealed hypovitaminosis A ($< 0.4 \mu\text{mol/L}$ (reference range 0.9–2.5 $\mu\text{mol/L}$)); anaemia (haemoglobin=109 g/L); low iron levels despite iron supplementation; and low folate levels. Results for screening for haemolytic anaemia were unremarkable.

CT and MRI of the brain showed narrowing of the left optic canal and internal auditory canal secondary to bony medullary expansion . Electrophysiology confirmed bilateral optic nerve dysfunction. There was mild to moderate bilateral sensorineural hearing loss above 4000 Hz. His bones and skull were found to be generally osteopenic on skeletal survey, with mild thinning of cortices in the long bones. He had normal electrophoresis, rendering thalassaemia unlikely; vitamin C, vitamin D and calcium levels were within normal limits.



- Objectives :

-

Competency Area I: The graduate as a health care provider

- 1.2. Adopt an empathic and holistic approach to the patients and their problems.
- 1.3. Assess the mental state of the patient.
- 1.4. Perform appropriately timed full physical examination of patients appropriate to the age, gender, and clinical presentation of the patient while being culturally sensitive.
- 1.5. Prioritize issues to be addressed in a patient encounter.
- 1.6. Select the appropriate investigations and interpret their results taking into consideration cost/ effectiveness factors.
- 1.7. Recognize and respond to the complexity, uncertainty, and ambiguity inherent in medical practice.
- 1.8. Apply knowledge of the clinical and biomedical sciences relevant to the clinical problem at hand.
- 1.9. Retrieve, analyze, and evaluate relevant and current data from literature, using information technologies and library resources, in order to help solve a clinical problem based on evidence (EBM).
- 1.10. Integrate the results of history, physical and laboratory test findings into a meaningful diagnostic formulation.
- 1.11. Perform diagnostic and intervention procedures in a skillful and safe manner, adapting to unanticipated findings or changing clinical circumstances.
- 1.12. Adopt strategies and apply measures that promote patient safety.
- 1.13. Establish patient-centered management plans in partnership with the patient, his/her family and other health professionals as appropriate, using Evidence Based Medicine in management decisions.
- 1.14. Respect patients' rights and involve them and /or their families/careers in management decisions. 1.15. Provide the appropriate care in cases of emergency, including cardio-pulmonary resuscitation, immediate life support measures and basic first aid procedures.



- 1.16. Apply the appropriate pharmacological and non-pharmacological approaches to alleviate pain and provide palliative care for seriously ill people, aiming to relieve their suffering and improve their quality of life.
- 1.17. Contribute to the care of patients and their families at the end of life, including management of symptoms, practical issues of law and certification.

Competency Area II: The graduate as a health promoter

- 2.1 Identify the basic determinants of health and principles of health improvement.
- 2.2 Recognize the economic, psychological, social, and cultural factors that interfere with wellbeing.
- 2.3 Discuss the role of nutrition and physical activity in health.
- 2.4 Identify the major health risks in his/her community, including demographic, occupational and environmental risks; endemic diseases, and prevalent chronic diseases.
- 2.5 Describe the principles of disease prevention, and empower communities, specific groups or individuals by raising their awareness and building their capacity.
- 2.6 Recognize the epidemiology of common diseases within his/her community, and apply the systematic approaches useful in reducing the incidence and prevalence of those diseases.
- 2.7 Provide care for specific groups including pregnant women, newborns and infants, adolescents and the elderly.
- 2.8 Identify vulnerable individuals that may be suffering from abuse or neglect and take the proper actions to safeguard their welfare.
- 2.9 Adopt suitable measures for infection control. Competency

Area III: The graduate as a professional

- 3.1. Exhibit appropriate professional behaviors and relationships in all aspects of practice, demonstrating honesty, integrity, commitment, compassion, and respect.
- 3.2. Adhere to the professional standards and laws governing the practice, and abide by the national code of ethics issued by the Egyptian Medical Syndicate.
- 3.3. Respect the different cultural beliefs and values in the community they serve.
- 3.4. Treat all patients equally, and avoid stigmatizing any category regardless of their social, cultural, ethnic backgrounds, or their disabilities.
- 3.5. Ensure confidentiality and privacy of patients' information.
- 3.6. Recognize basics of medico-legal aspects of practice, malpractice and avoid common medical errors. 3.7. Recognize and manage conflicts of interest.
- 3.8. Refer patients to appropriate health facility at the appropriate stage.



- 3.9. Identify and report any unprofessional and unethical behaviors or physical or mental conditions related to himself, colleagues or any other person that might jeopardize patients' safety.

Competency Area IV: The graduate as a scholar and scientist

- 4.1 Describe the normal structure of the body and its major organ systems and explain their functions.
- 4.2 Explain the molecular, biochemical, and cellular mechanisms that are important in maintaining the body's homeostasis.
- 4.3 Recognize and describe main developmental changes in humans and the effect of growth, development and aging on the individual and his family.
- 4.4 Explain normal human behavior and apply theoretical frameworks of psychology to interpret the varied responses of individuals, groups and societies to disease.
- 4.5 Identify various causes (genetic, developmental, metabolic, toxic, microbiologic, autoimmune, neoplastic, degenerative, and traumatic) of illness/disease and explain the ways in which they operate on the body (pathogenesis).
- 4.6 Describe altered structure and function of the body and its major organ systems that are seen in various diseases and conditions.
- 4.7 Describe drug actions: therapeutics and pharmacokinetics; side effects and interactions, including multiple treatments, long term conditions and nonprescribed medication; and effects on the population.
- 4.8 Demonstrate basic sciences specific practical skills and procedures relevant to future practice, recognizing their scientific basis, and interpret common diagnostic modalities, including: imaging, electrocardiograms, laboratory assays, pathologic studies, and functional assessment tests.

Competency Area V: The graduate as a member of the health team and the health care system

- 5.1 Recognize the important role played by other health care professions in patients' management.
- 5.2 Respect colleagues and other health care professionals and work cooperatively with them, negotiating overlapping and shared responsibilities and engaging in shared decision-making for effective patient management.
- 5.3 Implement strategies to promote understanding, manage differences, and resolve conflicts in a manner that supports collaborative work.
- 5.4 Apply leadership skills to enhance team functioning, the learning environment, and/or the health care delivery system.
- 5.5 Communicate effectively using a written health record, electronic medical record, or other digital technology.
- 5.6 Evaluate his/her work and that of others using constructive feedback.
- 5.7 Recognize own personal and professional limits and seek help from colleagues and supervisors when necessary.



- 5.8 Apply fundamental knowledge of health economics to ensure the efficiency and effectiveness of the health care system.
- 5.9 Use health informatics to improve the quality of patient care.
- 5.10 Document clinical encounters in an accurate, complete, timely, and accessible manner, in compliance with regulatory and legal requirements.
- 5.11 Improve the health service provision by applying a process of continuous quality improvement.
- 5.12 Demonstrate accountability to patients, society, and the profession.

Competency Area VI: The graduate as a lifelong learner and researcher

- 6.1 Regularly reflect on and assess his/her performance using various performance indicators and information sources.
- 6.2 Develop, implement, monitor, and revise a personal learning plan to enhance professional practice
- 6.3 Identify opportunities and use various resources for learning.
- 6.4 Engage in inter-professional activities and collaborative learning to continuously improve personal practice and contribute to collective improvements in practice.
- 6.5 Recognize practice uncertainty and knowledge gaps in clinical and other professional encounters and generate focused questions that address them.
- 6.6 Effectively manage learning time and resources and set priorities.
- 6.7 Demonstrate an understanding of the scientific principles of research including its ethical aspects and scholarly inquiry and Contribute to the work of a research study.
- 6.8 Critically appraise research studies and scientific papers in terms of integrity, reliability, and applicability.
- 6.9 Analyze and use numerical data including the use of basic statistical methods.
- 6.10 Summarize and present to professional and lay audiences