

Student guide

M2 2023-2024

First 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 التعميم والتعمم بالكمية ****

1. است اريجية التعمم الذاتي:

أسموب من أساليب التعمم المتطورة التي تمكن الطالب من تحصيل المعارف والمها ارت معتمداً عمى قد ارته الذاتية من مصادر التعميم المختلفة ، فيعمم نفسه بنفسه وفقاً لقد ارته ولسرعتة فى التعمم.

2. است اريجية التعمم التقاعمي:

تعتمد است اريجية التعميم التقاعمي عمى إسموب التفاعل بين الطالب والمحاضر والمادة العممية ويمكن تطبيق هذا المفهوم من خلال عدة وسائل منها التعميم التعاوني والتعميم الإلكتروني.

أ- التعمم التعاوني:

من خلال عمل الطلاب معا فى مجموعات صغيرة العدد لمعمل عمى حل المشكلات أو د ارسه حالة والمشاركة فى حملات التوعية فى تفاعل إيجابي متبادل يشعر فيه كل فرد أنه مسئول عن تعممه وتعمم الآخر .

ب- التعمم الإلكتروني:

وسيمة تدعم العممية التعميمية وتحولها من طور التمكن إلى طور الإبداع والتفاعل وتنمية المها ارت، حيث تعتمد عمى تطبيقات الحاسبات الإلكترونية وشبكات الإتصال والوسائط المتعددة فى نقل المها ارت والمعارف وتضم تطبيقات عبر الموقع الإلكتروني وغرف التدريس الافتراضية.

3. التدريب

- التدريب الإكمينيكي
- التدريب الميدانى
- القوافل الطبية
- التدريب الصيفى بالمستشفى
- التدريب بمركز التدريب الطبى المستمر ووحدة الابحاث الطبية المتقدمة
- التدريب بالمستشفيات بالخارج

| الاساليب التقييمية | الاساليب الغير تقييمية | أساليب أخرى لم تدريس التفاعلي |
|---|-----------------------------------|---|
| المحاضرات باستخدام الداتا شو & Tutorial السيمينار | حل المشكلات | البحوث وتقديم العروض العممية (أنشطة أخرى: المشاركة فى القوافل الطبية وحملات التوعية) |
| الدروس المعممية والإكمينية (مستشفى الكمية . مستشفى طب القصر العينى) | نماذج ومحاكاة Skill lab مشاهدة | الرسومات التوضيحية وعمل بوست ارت للأبحاث |
| | لعب الأدوار | التعمم الإلكتروني |
| | د ارسه الحالة | الزيا ارت الميدانية (الوحدات الصحية – المصل والمقاح – المحرقة بالمستشفى – وحدة التعقيم) |
| | المناقشة فى مجموعات صغيرة | التدريب الصيفى بمستشفى الجامعة وبالأخارج |

ولمؤكد من تحقيق مخرجات التعمم المستهدفة:-

يتم تقييم مستوى الطلاب بطرق متعددة تشمل:

- الامتحانات الدورية
- الامتحانات التحريرية
- حل المشكلات ود ارسه الحالة
- الامتحانات العممية والاكمينيكية وتطبيق نظام OSPE – OSCE

عميد الكمية

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) | <ul style="list-style-type: none"> - 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 | Comments |
|----------|--|----------|
| | 1 and 2 is unsatisfactory, 3, 4 and 5 is satisfactory performance | |

Preparation:

Is well prepared with relevant

1 2 3 4

5 information, uses a variety of references and summarizes key points

Critical thinking:

Identifies problem, analyzes problem,

suggests possible reasons for the 1 2 3 4 5
problem, helps group to formulate learning objectives

Participation:

Participates actively, talks on turn and
listens attentively to others

1 2 3 4 5

Communication Skill & Group

Skills: Respects tutor and colleagues,
communicates well uses appropriate
language, accepts feedback and
responds appropriately.

1 2 3 4 5

Contributes to group learning, shares
information with others, demonstrates
sensitivity to views and feeling of
others, takes on assigned tasks willingly

Presentation skills:

Presents the information relevant to the
learning objective of the case, explains 1
clearly the reasoning process with
regard to solving the problem

2 3 4 5

SATISFACTORY

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-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 submit their proposal (protocol) of the manuscript or how to accomplish the manuscript before end of term to have the marks of the portfolio
- Students should make an assignment about (Artificial intelligence and medicine) and submit it either as power point or as a you tube channel before end of term to have the marks of the portfolio
- Students should collect the presentations the group will do along the sessions of the cases and put them in the binder of the portfolio.

SHOULD ATTEND THE CLINICAL DISCUSSION OF THE
Students

CASE THAT WILL BE DONE EVERY WEEK ON LINE WITH MEMBERS OF THE DEPARTMENTS SHARING IN THE OBJECTIVES OF THE CASE , AND STUDENTS SHOLUD 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
 - Conferences attended by him if present
 - Visits done to clinical departments to see relevant experiments if present.
- **PORTFOLIO SHOULD BE SUBMITTED IN FULL BY end of term**
- **Portfolio scoring (Rubrics for evaluating portfolios):**
- **Each student should be rated as one of the followings :**
 - Out standing & 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

Cases

Cases for the second year students (first term) :

Cases for the module (NRS) :

Meningitis

A previously well 16-year-old African-American young man presented to the Emergency Department (ED) at October 6 university Children's Hospital with persistent vomiting, severe headaches, and decreased energy of 5 weeks duration. Five weeks earlier, the patient had presented to his pediatrician with headache and vomiting. He was treated with oral amoxicillin for presumed streptococcal pharyngitis, but the group A Streptococcus antigen test was negative. Three weeks later, he presented to a local ED with worsening nausea, vomiting, dizziness, poor oral intake, worsening headaches, neck stiffness and fever. Physical examination was significant for a strange affect, belligerent behavior and neck stiffness, but no other abnormalities were found. The evaluation included an examination of cerebrospinal fluid (CSF) which revealed a red blood cell count (RBC) of $3/\text{mm}^3$; white blood cell count (WBC) of $380/\text{mm}^3$ with 25% neutrophils, 66% lymphocytes and 9% monocytes; protein 148 mg/dL; and glucose 15 mg/dL. He was treated with ceftriaxone for possible bacterial meningitis. Further evaluation revealed a normal chest radiograph, no induration in response to a purified protein derivative (PPD) tuberculin skin test, a normal cranial computed tomography (CT) scan and a normal electroencephalogram. The CSF culture had no growth of bacteria and no organisms identified on Gram stain. After 4 days of treatment with ceftriaxone, he was discharged home with a revised diagnosis of presumed viral meningitis.

- Objectives :

Case (2) Complete transverse section of spinal cord :

An 85-year-old woman was brought to the emergency room by her son due to a penetrating stab injury on the anterior neck. A kitchen knife was deeply stuck in the midline of the anterior neck, but there was no active bleeding . The patient was semiconscious, and bradycardia and hypotension were noted. She had been diagnosed to have dementia and depression a long time previously. She thrust herself against a knife positioned at the level of the neck for the purpose of committing suicide, and the knife penetrated her neck. She bowed forward a few more times while the knife was stuck in her neck so that it would get deeper. Initial imaging of the neck using Computed Tomography (CT) with contrast enhancement showed the knife had penetrated the spinal cord completely, and there was a fracture of the T1 vertebral body. The emergency operation was performed immediately under general anesthesia.

The patient was tetraplegic, and her body temperature and Blood Pressure (BP) fluctuated postoperatively. On the 4th day after the surgical procedure, severe hypotension (BP, 50/20 mmHg) and bradycardia (pulse rate, 26) were noted. Cardiopulmonary resuscitation was performed immediately, and the vital signs were restored. Conservative treatment was administered later.

- Objectives :

Cases for the module ERS

Cases for the module ERS

Case (1) Menstrual and ovarian cycles :

Ann, a newlywed college student was asking what they will be taking in the second year medicine (M2) at October 6 university.

Munira told her that the students learn about the follicular and luteal phases of the menstrual cycle, the hormones involved, and the negative feedback that occurs. By the end of the case, students will understand the human female menstrual cycle and be able to predict when ovulation occurs during any given cycle.

- Objectives :

Case (2)

3-year-old boy was born by lower segment caesarean section following a normal antenatal scan at 42 weeks. He was found to have distal hypospadias at neonatal examination. He underwent stage-1 correction surgery of distal hypospadias at the age of 17 months uneventfully. Stage-2 correction surgery of distal hypospadias was planned at 3 years of age. Pre-operatively, his blood pressure was found to be 145/97; as such his surgery was cancelled and he was referred to Paediatric clinic for hypertension investigations.

: Objectives -



Cases for the Module (IMN) (Second year 2023-2024)

Case (1) diabetic obese woman :

A 60-year-old obese woman weighing 88 Kilograms , with a 48-year history of type 1 diabetes was admitted to the hospital for syncope. The patient complained recently from severe autonomic neuropathy with orthostatic hypotension. The syncope was ultimately attributed to the autonomic neuropathy and treated with midodrine.

She had been on NPH insulin 15 units and regular insulin 5 units before breakfast, regular insulin 5 units before dinner, and NPH insulin 6 units at bedtime. Her glucose control on this regimen had been satisfactory for her setting, with only occasional insulin reactions.

The glycated hemoglobin (A1C) on admission was 7.8 percent.

On the first full hospital day, the 6:30 AM blood glucose level was 101 mg/dL (5.6 mmol/L).

Objectives -

**Case (2) Atherosclerosis :**

A 52-year-old executive was referred to our clinic for risk factor management after undergoing coronary computed tomography angiography (CTA) as part of an Executive Physical. He has no history of coronary artery disease and exercises regularly without experiencing anginal symptoms.

His family history is notable for a myocardial infarction (MI) in his father at the age of 52 years. He is a lifelong non-smoker. He does not take medications.

His blood pressure was 110/75. His exam was notable for being overweight with a BMI of 27, but was otherwise unremarkable.

His total cholesterol is 206 mg/dL, HDL-C is 46 mg/dL, triglycerides are 178 mg/dL, calculated LDL-C is 124 mg/dL, and non HDL-C is 160 mg/dL. His fasting glucose is 86 mg/dL. His Hgb A1c is 5.6%.

His 10-year risk based on the 2013 ACC/AHA pooled ASCVD risk estimator is 3.7%. His coronary artery calcium (CAC) score is 120, which places him in the 87th percentile for his age, gender, and ethnicity.

- 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 cardiopulmonary 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 non-prescribed 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