

# Student guide

**M4** 2023-2024

First term



#### - Contents:

- 1-Guide lines (why P.B.L. "Problem Based Learning") (what the student will do this year) (modules in this term)
- 2-Schedule for lectures, practicals, cases (small group teaching), skill lab, & exams
- 3-Rubrics for grading assignments and presentations
- 4-Portfolio items
- 5-Cases

#### - 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 for the information of the objectives they got. Then the following session they should try to present the information they gazered 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, the tutor together with the students has the responsibility of setting the roles of the tutorial session.
- 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) (week 1)
  - One case will be red by the students
  - They make brain storming with each other and with the tutor to get the objectives the case is talking about. they will go home to search for them and make presentation about them the coming session
  - 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 stick more and more to them each presentation then at the last presentation of the module they will have certain mark among their portfolio total mark about:
    - 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 mark is given by the tutor )
  - After they 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 so as to be able to have the on line information uploaded weekly concerning the following:
  - Lectures
  - Videos
  - Presentation done by their colleagues
  - On line exams formative and summative
  - Each student will be examined clinically at the end of the module.



# - Scoring Rubric for Presentations:

Category	Scoring Criteria		Score
Organization	Were the main ideas presented in a clear manner?	5	
Organization (15 %)	Information is presented in a logical sequence.	5	
	Presentation appropriately cites requisite number of references.	5	
	- The Introduction is attention-getting,		
	- It lays out the problem well,	5	
	- It establishes a framework for the rest of the presentation.		
	Technical terms are well-defined in language that is	5	
	appropriate for the target audience.	3	
Content	The Presentation contains accurate information.	10	
(45 %)	The material included is relevant to the overall	10	
	message/purpose.	10	
	Appropriate amount of material is prepared, and the points	10	
	made reflect well their relative importance.	10	
	There is an obvious conclusion summarizing the	5	
	presentation.	7	
	Speaker maintains good eye contact with the audience and is	5	
	appropriately animated (e.g., gestures, moving around, etc.).	7	
Presentation (40 %)	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	5	
	not distracting.	3	
	Length of presentation is within the assigned time limits.	5	
	Information was well communicated.	10	
Score %	Total Points	100%	



# Steps to register on the Moodle e-learning website for Faculty of Medicine

1. Open any browser e.g. Chrome, Firefox, Edge, Safari .....

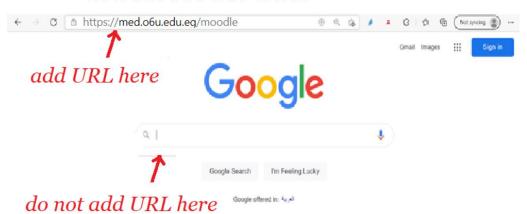


2. Then copy & paste this address in the URL box

https://med.o6u.edu.eg/moodle

N.B.

- It is https & not http
- There is no www in the address





3. Press "Enter" Key



4. Click on "log in" in the upper right corner of the screen.



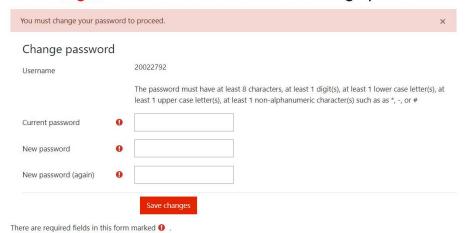


5. Write your ID number twice: in the "Username" & in the "Password" ..... here is an example:



20022792	Forgotten your username or password?			
•••••	Cookies must be enabled in			
☐ Remember username	your browser ?  Some courses may allow gue			
Log in	access			
	Log in as a guest			

6. Then click on "Log in" below. You will be asked to change your Password:



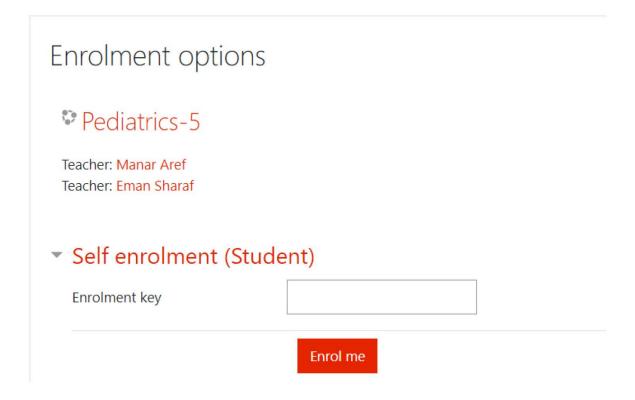
The new password must have at least 8 characters, at least 1 digit(s), at least 1 lower case letter(s), at least 1 upper case letter(s), at least 1 non-alphanumeric character(s) such as as \*, -, or #

**Very Important: DO NOT FORGET THE NEW PASSWORD** 



# How to enroll yourself in a Module?

Some modules need an "enrolment key" to enter it for the first time. Ask you teacher for this key.





# 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
Preparation: Is well prepared with relevant information, uses a variety of references and summarizes key points	1	2	3	4	5	
Critical thinking: Identifies problem, analyzes problem, suggests possible reasons for the problem, helps group to formulate learning objectives		2	3	4	5	
Participation: Participates actively, talks on turn and listens attentively to others		2	3	4	5	
Communication Skill & Group Skills: 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		2	3	4	5	
Presentation skills:  Presents the information relevant to the learning objective of the case, explains clearly the reasoning process with regard to solving the problem  Overall		2 SAT	3 ISFAC	4 TORY	5	UNSATISFACTORY



#### -The students portfolio (October 6 university - faculty of medicine - 2020 - 2021):

- Each student should go through one of the following links to make his google e-portfolio where he (she) will put the progression he will achieve in each module WEEK BY WEEK and e will send the link to the tutor to revise it. PAPER WORK OR CD OR E-MAIL ARE NOT ACCEPTED.
- Links to make e-portfolio using google sites

  https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2

  ahUKEwi9xOnhrYDzAhVERkEAHb\_0DCgQFnoECC0QAQ&url=https%3A%2F%2Fwww.mont
  clair.edu%2Fmedia%2Fmontclairedu%2Foit%2Fdocumentation%2Feportfolios%2FGoogle-SitesePortfolio-3-13-PF-Final.pdf&usg=AOvVaw2PTNDhBjsWkTV75RJGCoen

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#### - The student portfolio should contain the followings:

- 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 elecrtronic.
- 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.
- 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
- 1-Paragraph that summarizes his learning experience and contain the followings in short:
  - Resume of him
  - Impact made by the education on him
  - His present strengths
  - His present weakness
  - Future suggestions & goals
- 2-Any community medical work the student completed under supervision of a staff presenting the followings:
  - Name of staff & position
  - Date
  - Site
  - Results
  - Obstacles
- 3-His cases, objectives he got by brain storming, presentations done by him, (power point)
- 4-Medical pics & posters done by him or his group if present
- 5-Web page, or brouchure constructed by him or his group if present
- 6-Conferences attended by him if present
- 7-Visits done to clinical departments to see relevant experiments studied
- 8-Two to three education events attended by him
- 9-Two to three meetings with educational or clinical supervisors
- 10- Get started with scopus
- 1,2,3 SHOULD BE FORMED IN THE CARDIOLOGY MODULE
- 3, 4,5,6 SHOULD BE FORMED IN THE CHEST MODULE
- 3, 7,8,, SHOULD BE FORMED IN THE PEDIATRIC MODULE
- 3,9,10 SHOULD BE FORMED IN THE MUSCULOSKELETAL MODULE

#### BONUS MARKS ADDED TO THE PORTFOLIO MARK ONLY IF NEEDED

If any student shared in a paper with any of the staff

If any student constructed cases on sectra table

If any student shared the activities of the quality unit

If any student shared in the electronic evaluations



#### - 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



FOURTH YEAR	MID MODULE	CONTNUOUS	END	OSPE	OSCE
		ASSESSMENT	MODULE		
CARDIOLOGY	27 marks	10 marks total	50 marks	38 marks	OSCE
SM402 (125)	electronic	1.5 attendance	total	total	
		small groups	40 MCQ	-slides	
		1.5 attendance	10 SAQs	electronic	
		cases	electronic		
		4 presentation			
		3 portfolio			
CHEST SM403 (75)	18 marks total	4 marks total	30 marks	23 marks	OSCE
	15 marks	1 attendance	total	total	
	electronic	small groups	25 MCQ	-slides	
	exam	1 attendance	5 SAQs	electronic	
	3 marks	cases	electronic		
	history	1 presentation			
		1 portfolio			
PEDIATRICS 401	29 marks	8 marks total	50 marks	38 marks	OSCE
( 125)	electronic	3 attendance	total	total	
		sections	40 MCQ	-slides	
		1.5 attendance	10 SAQs	electronic	
		cases	electronic	18 ospe	
		2 presentation		electronic	
		1.5 portfolio		20 osce	
				clinical	
				_	
MUSCULOSKELETAL	27 marks	10 marks total	50 marks	38 marks	OSCE
SM404 ( 125)	electronic	1.5 attendance	total	total	
		sections	40 MCQ	-slides	
		1.5 attendance	10 SAQs	electronic	
		cases	electronic	and	
		4 presentation		practical	
		3 portfolio			



## Cases for the fourth year students modules

(Chest, CVS, Musculoskeletal, pediatrics)

#### Cases for Musculoskeletal module:

#### - Case One: (Red week (1) and discussed week 2)

#### - Lupus Nephritis

- A 45-year-old woman with systemic lupus erythematosus (SLE) presents to the emergency department with complaints of headache and fatigue.
- Her prior manifestations of SLE have been arthralgias, hemolytic anemia, malar rash, and mouth ulcers, and she is known to have high titers of antibodies to double stranded DNA as well as anti Sm antibody.
- She currently is taking prednisone, 5 mg daily, and hydroxychloroquine, 200 mg daily.
- On presentation, she is found to have a blood pressure of 190/110 with a heart rate of 98 beats/min.
- A urinalysis shows 25 red blood cells (RBCs) per high-powered field with 2+ proteinuria.
- Her blood urea nitrogen is 88 mg/dL, and creatinine is 2.6 mg/dL (baseline 0.8 mg/dL).
- She has not previously had renal disease related to SLE and is not taking nonsteroidal anti-inflammatory drugs.
- She denies any recent illness, decreased oral intake, or diarrhea.

#### What is the most appropriate next step in the management of this patient?

- a) Initiate azathioprine (immune suppressing agent).
- b) Prepare for kidney transplantation.
- c) <u>Initiate high-dose steroid therapy</u> ( pulse steroid therapy).
- d) Initiate plasmapheresis (technique used to wash out the harmful antibodies)
- e) Withhold all therapy until renal biopsy is performed

### Objectives:



#### Case Two: (Red week 2 and discussed week 3)

#### - Rheumatoid Arthritis.

- A 32-year-old female presents with episodes of pain, stiffness, and swelling in both hands and wrists for approximately 1 year.
- The episodes last for several weeks and then resolve.
- More recently, she noticed similar symptoms in her knees and ankles.
- Joint pain and stiffness are making it harder for her to get out of bed in the morning and are interfering with her ability to perform her duties at work.
- The joint stiffness usually lasts for several hours before improving. She also reports malaise and easy fatigability for the past few months, but she denies having fever, chills, skin rashes, and weight loss.
- Physical examination reveals a well-developed woman, with blood pressure 120/70 mm Hg, heart rate 82 bpm, and respiratory rate 14 breaths per minute.
- Her skin does not reveal any rashes.
- Head, neck, cardiovascular, chest, and abdominal examinations are normal. There is no hepatosplenomegaly.
- The joint examination reveals the presence of bilateral swelling, redness and tenderness of most proximal interphalangeal (PIP) joints, metacarpophalangeal (MCP) joints, the wrists, and the knees.
- Laboratory studies show a mild anemia with hemoglobin 11.2 g/dL, hematocrit 32.5%, mean corpuscular volume (MCV) 85.7 fL, white blood cell (WBC) count 7.9/mm3 with a normal differential, and platelet count 300,000/mm3.
- The urinalysis is clear with no protein and no red blood cells (RBCs). The erythrocyte sedimentation rate (ESR) is 75 mm/h, and the kidney and liver function tests are normal.

#### - The diagnosis is

- a) Gout
- b) Scleroderma
- c) Systemic lupus
- d) Rheumatoid arthritis

### - The diagnostic test of choice for this condition is

- a) Anti CCP antibody
- b) Anti Sm antibody



- c) Antidouble stranded DNA
- d) Anti Scl-70 antibody

**Objectives** 

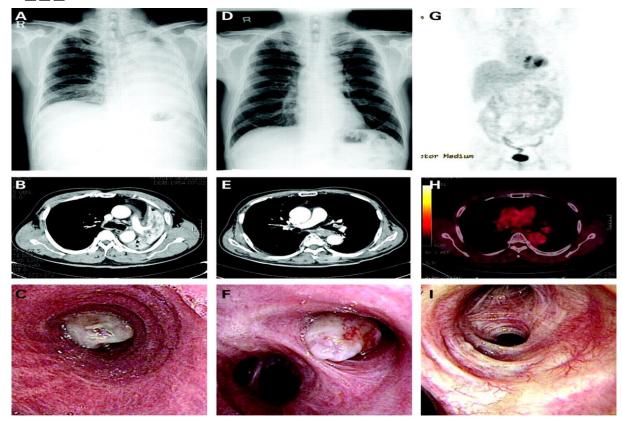


#### Cases for the module chest: (Red week 5 and discussed week 6,7,8)

- A 70-year-old man works in prints was admitted with severe dyspnea, paroxysmal nocturnal dyspnea and a productive cough with attacks of mild hemoptysis that had progressed over 4 days.
- He gave a background history of minor exertional breathlessness over the last 6 months and lost 15 kg in weight since the previous 2 months unintendedly. The patient was a smoker with a ≥40 pack-per-year
- The patient had undergone testing at an outside facility because of his symptoms; a plain chest x ray revealed opacity in the left lung field (fig 1A). As a result, the patient was diagnosed with pneumonia and treated with antibiotics. Despite antibiotic treatment, the resolution of pneumonic consolidation was delayed. Thus, the patient was referred to our hospital.
- The patient developed peripheral muscle weakness and lower limbs edema together with hypertension and repeated oral fungal infection and in the skin flexures. Serum potassium is low with elevated serum baseline cortisol level.
- Chest CT revealed a near total collapse of the left lung (fig 1B). No evidence of mediastinal nodal disease or a metastatic focus was detected.
- Bronchoscopic examination showed functional vocal cords and an endobronchial protruding mass in the distal left main bronchus (LMB) pedunculated mass in the LMB (fig 1C). Bronchoscopic washing and biopsies were performed, and the pathological examination confirmed the presence of small cell carcinoma CT of the brain was normal. Therefore, the patient was diagnosed with LS-SCLC.
- The physician referred him to oncology department for further management

**Objectives:** 







#### Cases for pediatric module:

#### Case (1): (Red week (3) and discussed week (4,5))

Complaint: my child hasn't passed stools

A 2 day old baby, born by spontaneous vaginal delivery at 39 weeks to G1,P0 mother with insignificant prenatal history, has not passed stools yet.

According to the mother the baby abdomen seems to be distended, and he vomited twice. The vomit was greenish color. The mother thought this was normal for newborn to vomit.

#### **On Physical Examination:**

- Baby alert, crying
- Chest: clear to auscultation bilaterally
- Hears sounds are normal with no murmurs
- Abdomen is distended
- Rectum is patent

Abdominal X ray Shows: Bowel obstruction in the small bowel

- 1) Which of the following is the most likely diagnosis of this patient?
  - a) Hirschsprung disease
  - b) Duodenal atresia
  - c) Meconium ileus
  - d) Intussusception
  - e) Imperforate anus
- 2) What is the next best step in management of this patient?
  - a) NPO
  - b) Nasogastric Tube
  - c) IV fluids
  - d) Replace electrolytes
  - e) Water soluble contrast enema
  - f) All the above



#### 3) What is the next step in diagnosis of this patient?

- a) Sweat chloride testing
- b) CFTR gene testing
- c) CT abdomen
- d) Nasal potential difference

#### **Answers:**

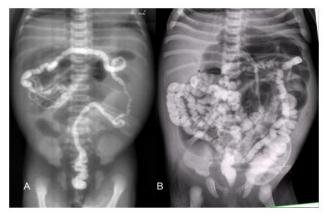
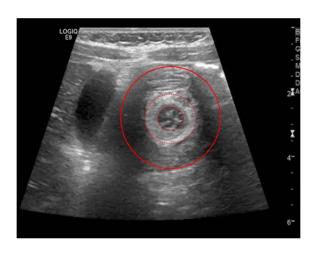


Fig3: Post procedure plain abdominal X-ray (contrast study) demonstrated an unused colon (microcolon) and filling defects of inspissated meconium pellets within the terminal ileum and cecum with the arrival of contrast agent to proximal dilated loop without any sign of perforation. A) Patient with few involved loops. B) Another patient with an elongated loop of small bowel.



# Target sign in abdominal ultrasound

in patient with intussusception

#### Cases for module Cardiology:

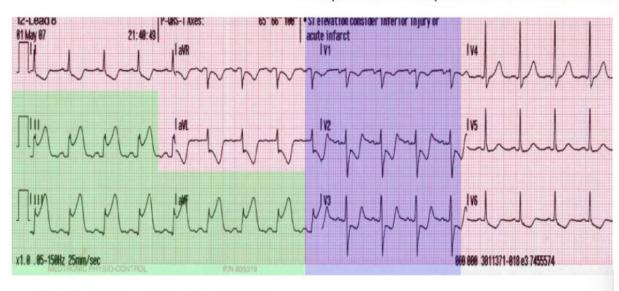
#### Case (1): (Red week 8 and discussed week 9,1)

A71 years old man present to emergency room with severe midsternal chest pain . He appears anxious and in distress HR=66/min ,BP 92/68 mmHg ,RR= 14 breath per minute,There is marked jagular venous distention , On auscultation an S4 galloop is audible and lung field are clear EVG shows 2 mm ST elevation in leads II,II,AVF



# ST elevation due to coronary occlusion

## Reciprocal ST depression in anterior lea



#### ST elevation in inferior leads

- What is your diagnosis?
- What is your Treatment?

## **Objectives:**

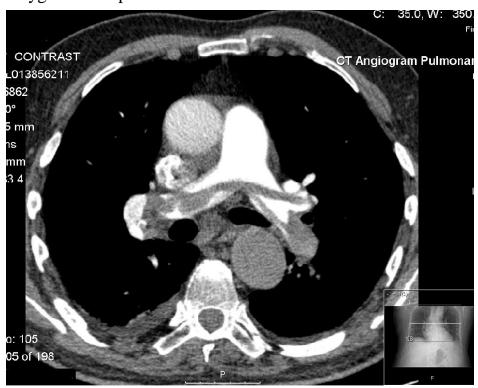


Case (2): pulmonary embolism



#### (Red week 10 and discussed week 11)

- A 36-year-old woman presents to the emergency department with worsening shortness of breath and pleuritic chest pain. Her symptoms began earlier in the day while she was waiting for her bus to return home. She recently returned from China to the United States for a business meeting. She denies any sick contacts and has not had these symptoms in the past. Medical history is unremarkable. She takes an oral contraceptive and a daily multivitamin. Her temperature is 98.6°F (37°C), blood pressure is 135/82 mmHg, pulse is 112/min, respirations are 24/min, and oxygen saturation is 89% on room air. A CT angiogram performedmed and demonstrates a filling defect in the pulmonary vasculature. She is immediately started on supplemental oxygen and heparin.



- What is the diagnosis of case?
- What is the treatment of the patient?
- What medication is related to. This condition?
- What is the possible risk factor for your diagnosis?

#### Learning Objectives

-