



Syllabus* General Medicine II (0111503601) First/Second Semester 2024/2025

| COARSE INFORMATION | |
|--|---|
| <p>Course Name: General Medicine Semester: 6th Year, First and Second Semesters Department: Department of Internal Medicine Faculty: Medicine</p> | <p>Course Code: 0111503601 Section: Internal Medicine Core Curriculum: Seminars and Practical sessions</p> |
| <p>Day(s) and Time(s): Sunday till Thursday: 08:00-16:00</p> <p>Classroom: Prince Hamza Teaching Hospital, Zarqa new hospital, King Hussein cancer center, King Hussein medical city and Queen Alia hospital</p> | <p>Credit Hours: 9 Prerequisites: Pass All preclinical courses</p> |
| TEACHING METHODS | |
| <p>This course adopts hybrid teaching methods. While the majority of teaching time (80%) will occur during face-to-face interactions at the hospital and the university halls. A portion of this course (20%) may be conducted online via virtual meetings. The administration of online teaching will be decided by the course instructor when circumstances require.</p> | |
| COARSE DESCRIPTION | |
| <p>This eight-week internal medicine rotation is aimed at providing sixth-year medical students with the basic clinical medical experience that will build a base in clinical problem solving and decision-making. During this course, students rotate with different medical teams in hospitals affiliated to the medical school in the university. On normal weekday, we would expect that all students arrive hospitals at 8:00 AM. And before the daily rotation, they are being asked to take medical history and to examine the patients in medical wards.</p> <p>In addition to the teaching tasks, faculty members regularly provide students with feedback and advice. At the end of this rotation, students are supposed to be familiar with Obtain a comprehensive history for medical problems. Acquire the basic skills of physical examination. Identify and explain abnormal signs. Formulate a case summary and differential diagnosis list. Suggest relevant investigations. Suggest management plan.</p> | |

The course will be delivered through a combination of active learning strategies. These will include:

- PowerPoint lectures and active classroom based discussion
- Collaborative learning through small groups acting in an interdisciplinary context.
- Relevant films and documentaries
- Pre-recorded video lectures
- E-learning resources: e-reading assignments and practice quizzes through Model and Microsoft Team

FACULTY INFORMATION

| | |
|-------------------------|--|
| Name | Dr. Sa'ed Zeitoun |
| Academic Title: | Assistant Professor |
| Office Location: | Prince Hamza Teaching Hospital / Zarqa New Hospital |
| Email Address: | saedm@hu.edu.jo |
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| Office Hours: | Sunday 09.00-12.00, <i>Please send an e-mail (saedm@hu.edu.jo) to confirm the meeting.</i> |

REFERENCES AND LEARNING RESOURCES

Required Textbook: List book or state: There is no required textbook for purchase. All compulsory weekly readings are available electronically on Model.

Suggested Additional Resources:

- Kumar & Clark. Clinical Medicine
- Macleod's Clinical Examination
- Davidson Textbook of Medicine
- Harrison's Principles of Internal Medicine
- Cecil Essentials of medicine.

Useful Web resources: www.UpToDate.com

STUDENT LEARNING OUTCOMES MATRIX*

| Core Curriculum Learning Outcomes | Program Learning Outcomes | Course Objectives | Course Student Learning Outcomes | Assessment Method |
|--|--|---|--|--|
| Think critically and creatively in a variety of methods in order to make decisions and solve problems. | Apply critical thinking and demonstrate problem-solving skills in two or more of the major fields of General medicine. | Develop an understanding of the basic principles of internal medicine. | Take directed medical History and perform a thorough physical examination. | <ul style="list-style-type: none"> ● Evaluation ● Mini OSCE ● OSCE ● MCQs Exam |
| | | Obtain a thorough foundation in the various fields of internal medicine. | Demonstrate an adequate knowledge of medical diseases. | <ul style="list-style-type: none"> ● Evaluation ● Mini OSCE ● OSCE ● MCQs Exam |
| Communicate competently with others using oral and written English skills | Use modern literature search methods to obtain information about internal medicine topics and write reports. | Obtain an understanding of the role of internal medicine in medical disciplines. | Acquire the ability to learn independently; articulate the importance of independent learning for future professional development | <ul style="list-style-type: none"> ● "On-line" reading assignments |
| Demonstrate competency in the use of research skills and various information sources. | Communicate results to internist and other clinicians. | Acquire positive attitudes towards further studies in internal medicine and towards its application in other medical disciplines. | Develop a positive attitude towards internal medicine and its applications in medicine, and towards further study and lifelong learning. | <ul style="list-style-type: none"> ● Research project |

OSCE = Objective Structured Clinical Examination, MCQ = Multiple choice question

COURSE REGULATIONS

Participation and attendance

Class participation and attendance are important elements of every student's learning experience at The Hashemite University, and the student is expected to attend all classes. A student should not miss more than 15% of the classes during a semester. *Those exceeding this limit of 15% will receive a failing grade regardless of their performance.* It is a student's responsibility to monitor the frequency of their own absences. **Attendance record begins on the first day of class irrespective of the period allotted to drop/add and late registration. It is a student's responsibility to sign-in; failure to do so will result in a non-attendance being recorded.**

In exceptional cases, the student, with the instructor's prior permission, could be exempted from attending a class provided that the number of such occasions does not exceed the limit allowed by the University. The instructor will determine the acceptability of an absence for being absent. A student who misses more than 25% of classes and has a valid excuse for being absent will be allowed to withdraw from the course.

No permission will be provided during face to face encounters. Permission from the instructor can only be obtained by sending your instructor an email. The email should contain the student name, date of absence and any supportive document. This documentation process is important to examine the supportive document and decide on the student's eligibility for the exemption.

Professionalism

Students are expected to learn and practice the habits of professionalism. This includes two main dimensions. First, maintaining a professional appearance. Students are expected to avoid casual wear, rather should wear formal attire. When students enter the hospital building, they should wear a white coat over their clothes. Wearing an identifying badge is a must, which should have the student name and their role. Students are expected to maintain a high level of self-care including tidiness and cleanliness. Second, maintain professional behavior. Students are expected to have a high level of maturity and treat others with courtesy and respect. Students are expected to stick to time requirements, being present before the start time of the teaching activity (~15 minutes before).

Students should aim for excellence in everything. Spending their maximum effort to get work completed. When students execute their assigned tasks, they should execute them with high quality.

Continuous professional development is a feature of all medical professionals. Students are expected to read regularly during their rotation. Focused reading on the topics faced during their clinical encounters. The goal is to strengthen learned theoretical knowledge, learn the applicability of this information to the clinical practice.

Students soon to become Professionals, should carry a high level of ethical standards, including confidentiality of private information and honesty in their communication with others.

Plagiarism

Plagiarism is considered a serious academic offence and can result in your work losing marks or being failed. HU expects its students to adopt and abide by the highest standards of conduct in their interaction with their professors, peers, and the wider University community. As such, a student is expected not to engage in behaviors that compromise his/her own integrity as well as that of the Hashemite University.

Plagiarism includes the following examples and it applies to all student assignments or submitted work:

- Use of the work, ideas, images or words of someone else without his/her permission or reference to them.
- Use of someone else's wording, name, phrase, sentence, paragraph or essay without using quotation marks.
- Misrepresentation of the sources that were used.

The instructor has the right to fail the coursework or deduct marks where plagiarism is detected

Late or Missed Assignments

In all cases of assessment, students who fails to attend an exam, class project or deliver a presentation on the scheduled date without prior permission, and/or are unable to provide a medical note, will automatically receive a fail grade for this part of the assessment.

- Submitting a term paper on time is a key part of the assessment process. Students who fail to submit their work by the deadline specified by the instructor, will automatically receive a 10% penalty. Assignments handed in more than 24 hours late will receive a further 10% penalty. Each subsequent 24 hours will result in a further 10% penalty.
- In cases where a student misses an assessment on account of a medical reason or with prior permission; in line with University regulations an incomplete grade for the specific assessment will be awarded and an alternative assessment or extension can be arranged.

COURSE ASSESSMENT

Course Calendar and Assessment

Students will be graded through the following means of assessment and their final grade will be calculated from the forms of assessment as listed below with their grade weighting taken into account. The criteria for grading are listed at the end of the syllabus

| Assessment | Grade weighting | Deadline Assessment |
|--------------------------|-----------------|---------------------|
| Evaluation | 10% | Daily |
| OSCE and Mini OSCE Exams | 30% | End of Rotation |
| Final MCQ Exam | 45% | End of year |
| Oral exam | 15% | End of year |

Evaluation:

Evaluation is performed by multiple teaching faculty who participate in teaching sessions. The marks are scored based on multiple aspects of the student performance which includes the following: professionalism, attitude and attendance.

The student's absence from any teaching activity will be considered absent for that day. Any absence will take half a mark from the total evaluation score. Note, that students with absence rates higher than 10%, without having an acceptable leave excuse, will be disallowed from taking the exams.

Homework: Homework assignments or self-tests may be given to the students

Quizzes: Unannounced quizzes will be given during or/and at the end of each chapter based upon the previous lectures. It will enforce that you come prepared to the class.

Exams: Include OSCE, mini OSCE, Final and oral exams. Please refer to **exam blueprint** below for further details.

Grades are not negotiable and are awarded according to the following criteria*:

| Letter grade | Description | Grade Points |
|--------------|-------------|--------------|
| A+ | Excellent | 4.00 |
| A | | 3.75 |
| A- | | 3.50 |
| B+ | Very Good | 3.25 |
| B | | 3.00 |
| B- | | 2.75 |
| C+ | Good | 2.50 |
| C | | 2.25 |
| C- | | 2.00 |
| D+ | Pass | 1.75 |
| D | Pass | 1.50 |
| F | Fail | 0.00 |
| I | Incomplete | - |

Exam Blueprint- Internal Medicine II

Exam content:

Exam content is determined by a pre-established blueprint. The blueprint is developed by the internal medicine department and is reviewed annually and updated on as needed basis.

The primary medical content categories of the blueprint are shown below, with the percentage assigned to each for a typical exam:

| Topics: | Mark percentage: % |
|-------------------------------|--------------------|
| Cardiology | 15% |
| Renal disorders | 15% |
| Pulmonary | 15% |
| Gastroenterology & Hepatology | 15% |
| Diabetes & Endocrinology | 8% |
| Hematology/Oncology | 8% |
| Infectious diseases | 8% |
| Rheumatology | 8% |
| Other specialties* | 8% |

*Exam questions in the content areas above may also include other sub-specialties

Exam format:

- Final exam:

The final exam is composed of single-best-answer multiple-choice questions.

The majority of the exam questions will test knowledge of core medical principles. However, a good portion of these questions will include application of these concepts into new contexts and test the understanding of these principles.

A smaller proportion of questions describe patient scenarios with more complex thinking process, which include problem solving skills, judgment and clinical decision making. The exam might include what work done (that is, tasks performed) by physicians in the course of practice:

- Making a diagnosis.
- Ordering and interpreting results of diagnostic tests.
- Recommending treatment or other patient care.

- Objective structured clinical examination (OSCE)

Clinical examinations are structured examinations which followed standardized checklists. These checklists are updated regularly to ensure our students have acquired skills and competencies needed for clinical practice of a general practitioner. Also, our exam will assess the interviewing and communication skills of students.

This exam focuses on assessing the following skills:

- Focuses history taking directed to a differential diagnosis list for a common presentation. Reaching a diagnosis is not necessary, rather the approach to a diagnosis is what matters.
- The performance of Physical Examination, with a focus on the techniques and steps needed to perform each examination task, appropriately eliciting positive findings and finally interpretation of findings in reaching a differential diagnosis.

- Mini-OSCE exam

Each question item is usually divided into two components, the first component is focused on the assessment skills of students particularly when interpretation multimedia content, including physical examination signs and interpretation of diagnostic test including laboratory, radiological and common medical procedures (e.g. Electrocardiogram). The second component is to assess another aspect of the underlying disease (such as complication or treatment).

- Oral examination:

Oral examination usually focuses on approach to common medical problems, with a particular focus on medical emergencies.

The examination blueprint is expanded to topics and subtopics to help students focus their preparation efforts on core medicine topics. This blueprint is detailed below:

| CARDIOLOGY |
|--|
| <p>I. Knowledge/Mix of Diseases/Patients</p> <p>Ischemic heart disease: unstable angina and myocardial infarction. Heart failure. Congenital heart disease with onset of manifestations in the adult. Valvular heart disease—causes. Clinical diagnosis of rheumatic fever. Hypertension: essential and secondary. Cardiomyopathy and Pericardial diseases. Supraventricular rhythms Ventricular Arrhythmias Atrial fibrillation, atrial flutter. Heart block 1st , 2nd and 3rd degrees. Bundle branch and hemiblocks. Main supraventricular tachycardias. Infective endocarditis Cardiac tumors Pulmonary cardiac diseases Hyperlipidemia</p> |
| <p>II. History Skills</p> <p>Use all modalities in "pain" history to distinguish coronary artery disease from other causes of chest pain Recognize the features of acute coronary syndrome Elicit history of risk factors for coronary artery disease. Obtain focused history for common presentations of cardiovascular diseases (e.g. palpitations) In hypertensive patient, assess blood pressure control and obtain careful history of medication compliance. Obtain history for rheumatic fever or congenital heart disease. Recognize importance of family history in assessment of cardiovascular disease.</p> |
| <p>II. Physical Exam Skills</p> <p>Assess arterial pulses and recognize pulsus alternans, bisferiens pulse, and paradoxical pulse. Determine venous pressure by examination of neck veins. Perform hepatojugular reflux test to assess venous pressure. On cardiac auscultation, recognize: S-1, S-2, and normal physiologic splitting. S-3, S-4, and how they are best appreciated. Systolic and diastolic murmur--effects of physiologic and pharmacologic interventions. Special characteristics of the murmur of MVP and HCM. Pericardial friction rub.</p> |
| <p>IV. Diagnostic Tests</p> <p>Interpretation of Electrocardiogram (ECG) Learn the role and indications of cardiac enzymes Interpretation and approach to chest x-ray (CXR)</p> |

V. Therapeutic Interventions

Approach an emergency presentation of acute coronary syndrome

Learn the principles of heart failure management

Know therapeutic indications for angioplasty and other therapeutic applications of catheterization.

Learn the indication of placement of different cardiac devices (e.g. pacemakers or ICD devices ..etc).

Describe therapeutic approach to clinical syndromes described in I.

RENAL DISORDERS

I. Knowledge/Mix of Diseases/Patients

Renal anatomy and physiology

Acute Kidney Injury

Chronic renal failure and its associated metabolic-endocrine, GI, cardiovascular hematologic, and neuromuscular complications.

Nephritic syndrome (Glomerulonephritis)

Nephrotic syndrome

Rapidly Progressive Glomerulonephritis

Renal replacement therapies

Tubulo-interstitial disease.

Renal cystic disease

Acid base disorders

Water disorders

Potassium disorders

Calcium disorders

Urinary tract infection and pyelonephritis

Drug intoxication

II. History Skills

Obtain focused history to assess the etiology of common presentations of Renal diseases (e.g. hematuria, edema)

Obtain history to identify the etiology of acute kidney injury

Learn to distinguish between prerenal, intra-renal, and post-renal using clinical and laboratory parameters.

Assess fluid intake and fluid loss

Assess for the presence of Rapidly Progressive Glomerulonephritis (RPGN)

Identify common causes of acute tubular necrosis (e.g. hypotension episodes)

Assess the intake of nephrotoxic drugs or drugs that affect urine color

Assess symptoms of obstructive uropathy (upper and lower), with particular focus on assessment of urine output (polyuria, oliguria, anuria) and obstructive symptoms

Differentiate clinically between upper urinary tract infection (UTI) and upper UTI

Assess the control of chronic medical illnesses (i.e., diabetes and hypertension)

know the clinical manifestations of uremia.

III. Physical Exam Skills

Recognize signs of uremia (cognitive decline, asterixis, odor of breath..etc).

Auscultate for bruits.

Attempt to palpate for kidneys.

Palpate and Percuss bladder size.

Assess physical signs of urinary tract infection including suprapubic tenderness and costophrenic angle tenderness

IV. Diagnostic Tests

Interpretation of serum Creatinine and Urea

To differentiate between prerenal and intrarenal impairment based on laboratory data

Differentiate between acute kidney injury and chronic kidney disease based on laboratory and radiological features

Differentiate nephrotic and nephritic presentations based on laboratory tests and clinical presentation

Understand the interpretation of basic urinary tests including urinalysis and urine spot protein to creatinine ratio.

Evaluate the patient with glomerulonephritis for multisystem disease or secondary etiology.

Choose the most appropriate imaging test for renal patient.

IV. Therapeutic interventions

Learn the indications of renal replacement therapies

Know how to treat renal emergencies (e.g. hyperkalemia)

Learn the proper choice of fluid replacement for different clinical scenarios

PULMONARY

I. Knowledge/Mix of Diseases/Patients

Asthma

Chronic obstructive lung diseases (chronic bronchitis, Emphysema)

Bronchiectasis

Cystic fibrosis

Interstitial lung diseases

- Occupational lung disease.
- Hypersensitivity pneumonias.
- Sarcoidosis.
- Idiopathic pulmonary fibrosis.

Infectious lung diseases

Community acquired pneumonia.

Nosocomial pneumonias

Tuberculosis

Pulmonary vascular lung diseases

Pulmonary thromboembolism

Pulmonary hypertension

Noncardiogenic pulmonary edema (ARDS).

Diseases of the pleura (e.g. Pneumothorax)

Pleural effusion

Neoplastic disease of the lung

- Bronchogenic carcinoma.

- Paraneoplastic syndromes.

II. History Skills

Correctly characterize respiratory symptoms of dyspnea, cough, and expectoration.
Obtain careful history of accidental or occupational exposure to potential lung toxins.
Obtain a precise history of tobacco use, including passive cigarette smoke.
Obtain family history for cystic fibrosis, emphysema, asthma, tuberculosis, collagen vascular diseases, and lung neoplasm.
Obtain history of drug exposure and medication use.
Determine risk factors for HIV and TB.

III. Physical Exam Skills

Examine the chest by inspection
Identify abnormal respiratory patterns.
Recognize findings suggesting pulmonary disease such as deviated trachea, digital clubbing.
Examine the chest by palpation
Appreciate the significance of supraclavicular adenopathy, crepitation, and tenderness.
Examine the chest by percussion
Distinguish normal and abnormal resonance.
Further define areas of dullness by special maneuvers such as vocal and tactile fremitus.
Examine the chest by auscultation
Recognize normal breath sounds and characterize.
Recognize adventitious breath sounds such as crackles, rhonchi, and wheezes.
Understand the diagnostic implications of the adventitious sound.

IV. Diagnostic Test Skills

Interpretation arterial blood gases.
Understand the use of the pulse oximeter.
Interpretation of spirometry including Flow-Volume loops.
Interpretation of the chemical profile of pleural effusions.
Understand the indications for Pulmonary function tests.
Understand the indications for Thoracentesis and Pleural Biopsy.

V. Therapeutic Skills

The student must be familiar with the general management of all diseases listed in 1.
The student should be able to:
Correctly select antimicrobial agents for respiratory infection.
Recognize a significant reaction to PPD.
Know the indications and side effects for the commonly used medications in pulmonary medicine.

DIABETES AND ENDOCRINOLOGY

I. Knowledge/Mix of Diseases/Patients

Diseases of the pituitary

Diabetes insipidus

Pituitary tumors

Acromegaly

Cushing Disease

Prolactinoma

Hypopituitarism

Empty Sella Syndrome

Thyroid disease

Hypothyroidism causes

Hyperthyroidism

Graves' disease.

Toxic multinodular goiter

Toxic adenoma

Factitious

Thyroiditis

Chronic thyroiditis (Hashimoto's)

Subacute thyroiditis

Approach to thyroid nodule

Diseases of the adrenal cortex

Cushing Syndrome.

Hyperaldosteronism.

Addison's Disease.

Pheochromocytoma.

Diabetes mellitus.

Diagnosis.

Hypoglycemia

Disorders of the parathyroid gland and of calcium metabolism.

Metabolic bone disease

Osteoporosis.

Osteomalacia.

Paget's disease

Renal osteodystrophy

II. History Skills

Demonstrates knowledge necessary to take a proper history for a patient suspected of having an endocrine or metabolic disorder.

In a patient with diabetes mellitus, the student must obtain and put in chronological order a detailed history of the disease, including all complications, hospitalizations, medications.

III. Physical Exam

Know importance of:

Weight.

Height.

Skeletal proportions.

Recognize exophthalmus and abnormal ocular motility.

Evaluate thyroid size, nodularity, tenderness, and bruit.

Evaluate skin-temperature, moisture, pigmentation, pretibial myxedema, diabetic dermopathy.

Evaluate quality of voice.

Evaluate texture and pattern of hair.

Recognize diabetic retinopathy.

IV. Diagnostic Skills

Understand the use of thyroid function tests.

Describe the tests necessary to diagnose diseases listed in 1.

V. Therapeutic Interventions

Know general treatment options and principles for diabetic ketoacidosis.

Understand the indications, side effects, and adverse reactions for each of the following:

L-thyroxin.

Glucocorticoids.

Antithyroid drugs.

Oral hypoglycemics.

Insulin (all forms).

GASTROENTEROLOGY AND HEPATOLOGY

I. Knowledge/Mix of Diseases/Patients

Diseases of the esophagus: anatomic and motor causes of esophagitis (GERD).

H Pylori and PUD.

Disorders of absorption.

Inflammatory bowel disease.

Liver and biliary tract disease

Acute and chronic hepatitis.

Cirrhosis and alcoholic liver disease.

Approach to patients with abnormal LFTs.

Pancreatic diseases

Acute pancreatitis.

Chronic pancreatitis.

Pancreatic cancer.

Endocrine tumors.

Large Bowel diseases

Polyps and surveillance

Chronic diarrhea

Colon cancer and management

II. History Skills

In obtaining history from a patient with a GI complaint:

Describe all characteristics of abdominal pain.

Obtain a History in a methodical way and Create an appropriate differential diagnosis.

Recognize potential importance of family history and medication history and GI side effects of all drugs.

History of diet, weight, food intolerance, bowel pattern, and bleeding.

Compare and contrast history of inflammatory bowel disease vs. irritable bowel syndrome.

Precise history taking in GERD and dysphagia.

III. Physical Exam Skills

Students must do complete exam of abdomen and rectal exam including:

Auscultation for bowel sounds and bruits.

Percussion for liver size.

Palpation for spleen.

Recognize need for additional physical exam maneuvers such as:

Shifting dullness and fluid wave when ascites is suspected.

Murphy's sign for right upper quadrant pain or tenderness.

Eliciting signs of peritonitis.

Perform rectal digital exam and check for fecal blood.

IV. Diagnostic Studies

Know indications for paracentesis.

Know indications for placement of nasogastric tube.

Properly interpret the following laboratory tests:

Serologic studies for viral and autoimmune hepatitis.

Liver function tests.

Indications for upper and lower GI endoscopies.

V. Therapeutic Skills

The student should know indications, side effects, interactions and follow-up for the most commonly used GI medications (e.g. PPIs, Laxatives, Prokinetic agents).

HEMATOLOGY/ONCOLOGY

I. Knowledge/Mix of Diseases/Patients

Pathophysiology of anemia
Iron deficiency anemia
Anemia of chronic disease
Megaloblastic anemia
Hemolytic anemias (congenital and acquired)
Myeloproliferative disorders
Leukemias (acute and chronic)
Lymphoma (Hodgkin's, non-Hodgkin's and plasma cell myeloma)
Clotting disorders
Platelet and vessel wall
Coagulation and thrombosis
Hypercoagulable state

II. History Skills

Knowing the presenting signs of anemia
Recognize that symptoms of angina, claudication, TIA may be unmasked by anemia.
Evaluate patients with bleeding disorders
Learn to differentiate between platelet disorders versus symptoms of coagulation disorder
Recognize the symptoms of hematological malignancies and/or lymphoma
Recognize the importance of the family history in patients with anemia and coagulation disorders

III. Physical Diagnosis Skills

Recognize ecchymotic or petechial rash.
Palpate all lymph node areas
Assess for the presence of organomegaly (i.e., spleen and liver), and learn the underlying etiology

IV. Diagnostic Skills

Differentiate between types of anemia based on basic blood assessment based on:

- Complete blood count (CBC)
- Blood smear

Assess for the presence of hemolytic anemia using: Reticulocyte count, Serum haptoglobin, Lactate dehydrogenase, Coombs test..etc.
Hemoglobin electrophoresis
Urine hemosiderin.
Know the proper laboratory evaluation for patients with bleeding diathesis

V. Therapeutic Interventions

Know the appropriate indications for transfusion of erythrocytes and platelets.
Know indications for fresh frozen plasma, cryoprecipitate, and purified factor concentrates.

INFECTIOUS DISEASES

I. Knowledge/Mix of Diseases/Patients

Clinical syndromes

Gram-negative sepsis

Septic shock

Infective endocarditis

Upper and lower respiratory infections

Urinary tract infections

Soft tissue infection

Tuberculosis

Mycoplasma pneumonia

Viral infections such as Influenza A, B, H1N1, Hepatitis, HIV and the latest COVID19

Fever of unknown origin

II. History Skills

Demonstrate at bedside ability to elicit history with special attention to relevant travel and residential history, animal contact, work and recreational activity, drug use and sexual history.

Elicit any co-existing disease which may be relevant to pathogenesis of infection.

III. Physical Examination

Demonstrate ability to perform thorough physical exam in effort to determine source of infection.

Recognize skin lesions which may provide diagnostic clues to etiology of infection.

Recognize fever patterns and their possible diagnostic indications.

Perform Kernig and Brudzinski tests in evaluating for meningitis.

Learn to interpret the result of Purified-Protein derivative (PPD) skin test

IV. Diagnostic Tests

Obtain sputum on patients with pneumonia.

Interpret body fluid results (CSF, pleural, peritoneal, joint).

V. Therapeutic Interventions

Choose appropriate anti-microbial regimens for common infections.

Know common or serious side effects of anti-microbial agents.

RHEUMATOLOGY

I. Knowledge/Mix of Diseases/Patients

Systemic Lupus Erythematosus
Rheumatoid arthritis
Scleroderma
Mixed connective tissue disease
Sjogren's syndrome
Ankylosing spondylitis
Vasculitic syndromes
Sarcoidosis
Osteoarthritis
Psoriatic arthritis and arthritis associated with GI diseases
Familial Mediterranean Fever
Behcet's disease
Gout
Pseudogout

II. History Skills

Demonstrate ability to elicit history of multisystem disease. Know importance of extra-articular symptoms such as rash, uveitis, aphthous ulcers, alopecia, and pleuritic pain. In patient with joint disease, determine presence or absence of morning stiffness, redness, heat, swelling, restricted movement.

III. Physical Exam Skills

Know the physical findings associated with each of the diseases listed in 1. Evaluate each joint for swelling, erythema, tenderness, crepitation, contracture, deformity. Determine range of motion and compare to normal. Identify Heberden node, Bouchard node, ulnar deviation, Swan neck deformity. Demonstrate joint effusion. Examine the spine. Evaluate chest expansion for spondylitis.

IV. Diagnostic Tests

Know the basics of diagnostic joint aspiration. Learn the interpretation of anti-Nuclear antibodies. Know when to order the following tests and the significance of: Rheumatoid factor, anti-DNA, anti-SM, anti-RNP, anti-RO, anti-LA, ANCA, anti-CCP.

V. Therapeutic Interventions

Know general treatment options for all diseases listed in I.

A.