



Syllabus* General Medicine II (0111503601) First/Second Semester 2021/2022

COARSE INFORMATION	
Course Name: General Medicine Semester: 6 th Year, First and Second Semesters Department: Department of Internal Medicine Faculty: Medicine	Course Code: 0111503601 Section: Internal Medicine Core Curriculum: Seminars and Practical sessions
Day(s) and Time(s): Sunday till Thursday: 08:00-16:00 Classroom: Prince Hamzeh Teaching Hospital	Credit Hours: 9 Prerequisites: Pass All preclinical courses
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.Ahmad Al-Sheyyab
Academic Title:	Full time lecturer
Office Location:	Prince Hamzeh Teaching Hospital
Email Address:	ahmedm_ya@staff.hu.edu.jo
Office Hours:	Monday 09.00-12.00, <i>Please send an e-mail (ahmedm_ya@staff.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

Participation

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 and 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

Description of Exams

Test questions will predominately come from material presented in the lectures. Semester exams will be conducted during the regularly scheduled lecture period. Exam will consist of a combination of multiple choice, short answer, match, true and false and/or descriptive questions.

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.

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	-

CARDIOVASCULAR SYSTEM

I. Knowledge/Mix of Diseases/Patients

- A. Ischemic heart disease: unstable angina and myocardial infarction.
- B. Heart failure.
- C. Congenital heart disease with onset of manifestations in the adult.
- D. Valvular heart disease—causes.
- E. Clinical diagnosis of rheumatic fever.
- F. Hypertension: essential and secondary.
- G. Cardiomyopathy and Pericardial diseases.
- H. Arrhythmias.
 - 1. Distinction between ventricular and supraventricular rhythms.
 - 2. Atrial fibrillation, atrial flutter.
 - 3. Heart block 1o, 2o, 3o.
 - 4. Bundle branch and hemiblocks.
 - 5. Main supraventricular tachycardias.
- I. Infective endocarditis
- J. Cardiac tumors
- k. Pulmonary cardiac diseases
- L. Hyperlipidemia

II. History Skills

- A. Obtain history of risk factors for coronary artery disease.
- B. Obtain history for rheumatic fever or congenital heart disease.
- C. Recognize importance of family history in assessment of cardiovascular disease.
- D. Use all modalities in "pain" history to distinguish coronary artery disease from other causes of chest pain.
- E. In hypertensive patient, obtain careful history of medication compliance.

III. Physical Exam Skills

- A. Determine venous pressure by examination of neck veins.
- B. Assess arterial pulses and recognize pulsus alternans, bisferiens pulse, and paradoxical pulse.
- C. Perform hepatojugular reflux test to assess venous pressure.
- D. On cardiac auscultation, recognize:
 - 1. Systolic and diastolic murmur--effects of physiologic and pharmacologic interventions.
 - 2. Pericardial friction rub.
- E. On cardiac auscultation, recognize:
 - 1. S-1, S-2, and normal physiologic splitting.
 - 2. S-3, S-4, and how they are best appreciated.
 - 3. Systolic and diastolic murmur--effects of physiologic and pharmacologic interventions.
 - 4. Special characteristics of the murmur of MVP and HCM.
 - 5. Pericardial friction rub.

- IV. Diagnostic Tests
 - A. Recognize a normal EKG.

B. Recognize a normal Chest X-ray.

V. Therapeutic Interventions

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

B. Describe therapeutic approach to clinical syndromes described in I.

DISEASES OF THE KIDNEY AND URINARY TRACT

I. Knowledge/Mix of Diseases/Patients

A. Renal anatomy and physiology

B. Learn to differentiate between acute renal injury and chronic kidney disease.

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

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

E. Nephritic syndrome (Glomerulonephritis)

F. Nephrotic syndrome

G. Tubulo-interstitial disease.

H. Renal cystic disease

I. Acid base disorders

J. Water disorders

K. Potassium disorders

L. Calcium disorders

M. Urinary tract infection and pyelonephritis

II. History Skills

In the patient who presents with a problem of the urinary tract, the student will determine by history:

A. Urine color, hematuria.

B. Frothy urine

C. Urine output (polyuria, oliguria, anuria).

D. Fluid intake and fluid loss

E. Episodes of hypotension

F. Control of chronic medical illnesses (diabetes and hypertension)

G. Intake of nephrotoxic drugs or drugs that affect urine color

H. The clinical manifestations of uremia.

I. Irritative urinary symptoms (Dysuria, diminished stream)

J. Obstructive bladder symptoms (weak stream, double voiding..etc)

III. Physical Exam Skills

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

B. Auscultate for bruits.

C. Attempt to palpate for kidneys.

D. Percuss bladder size.

IV. Diagnostic Tests

The student should be able to:

- A. Interpretation of serum Creatinine and Urea, using them to differentiate between prerenal and intrarenal impairment.
- B. Differentiate nephrotic and nephritic presentations based on laboratory tests and clinical presentation
- C. Understand the interpretation of basic urinary tests including urinalysis and urine spot protein to creatinine ratio.
- D. Evaluate the patient with glomerulonephritis for multisystem disease.
- E. Choose the most appropriate imaging test for the specific patient problem.

V. Therapeutic Interventions

The student should be able to:

- A. Manage the patient with acute renal failure and know all indications for dialysis.
- B. Recognize basic management aspects of electrolyte disturbances

DISORDERS OF THE RESPIRATORY SYSTEM

I. Knowledge/Mix of Diseases/Patients

A. Diseases of airflow limitation

1. Asthma.
2. Bronchitis.
3. Emphysema.
4. Bronchiectasis.
5. Cystic fibrosis.

B. Interstitial lung diseases

1. Occupational lung disease.
2. Hypersensitivity pneumonias.
3. Sarcoidosis.
4. Idiopathic pulmonary fibrosis.

C. Infectious lung diseases

1. Community acquired pneumonia.
2. Nosocomial pneumonias.
3. Tuberculosis.

D. Pulmonary vascular lung diseases

1. Pulmonary thromboembolism.
2. Pulmonary hypertension.
3. Noncardiogenic pulmonary edema (ARDS).

E. Neoplastic disease of the lung

1. Bronchogenic carcinoma.
2. Paraneoplastic syndromes.

F. Diseases of the pleura

1. Pleural effusion.
2. Pneumothorax.

II. History Skills

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

III. Physical Exam Skills

- A. Examine the chest by inspection
 1. Identify abnormal respiratory patterns.

2. Recognize findings suggesting pulmonary disease such as deviated trachea, digital clubbing.
 - B. Examine the chest by palpation
 1. Appreciate the significance of supraclavicular adenopathy, crepitation, and tenderness.
 - C. Examine the chest by percussion
 1. Distinguish normal and abnormal resonance.
 2. Further define areas of dullness by special maneuvers such as vocal and tactile fremitus.
 - D. Examine the chest by auscultation
 1. Recognize normal breath sounds and characterize.
 2. Recognize adventitious breath sounds such as crackles, rhonchi, and wheezes.
 3. Understand the diagnostic implications of the adventitious sound.
- IV. Diagnostic Test Skills
- A. The student should be able to:
 1. Interpret arterial blood gases.
 2. Understand the use of the pulse oxymeter.
 3. Interpret spirometry including Flow-Volume loops.
 4. Interpret the chemical profile of pleural effusions.
 - B. The student should understand the indications for:
 1. Pulmonary function tests.
 2. Thoracentesis.
 3. Pleural biopsy.
- V. Therapeutic Skills
- A. The student must be familiar with the general management of all diseases listed in 1.
 - The student should be able to:
 1. Correctly select antimicrobial agents for respiratory infection.
 2. Recognize a significant reaction to PPD.
 3. Know the indications and side effects for the commonly used medications in pulmonary medicine.

ENDOCRINOLOGY AND METABOLISM

I. Knowledge/Mix of Diseases/Patients

- A. Diseases of the pituitary
 1. Diabetes insipidus.
 2. Pituitary tumors
 - a. Acromegaly.
 - b. Cushing Disease.
 - c. Prolactinoma.
 3. Hypopituitarism.
 4. Empty Sella Syndrome.
- B. Thyroid disease
 1. Hypothyroidism causes.
 2. Hyperthyroidism.
 - a. Graves disease.
 - b. Toxic multinodular goiter.

- c. Toxic adenoma.
 - d. Factitious.
- 3. Thyroiditis.
 - a. Chronic thyroiditis (Hashimoto's).
 - b. Subacute thyroiditis (painful and painless).
- 4. Approach to thyroid nodule
- C. Diseases of the adrenal cortex
 - 1. Cushing Syndrome.
 - 2. Hyperaldosteronism.
 - 3. Addison's Disease.
- D. Pheochromocytoma.
- E. Diabetes mellitus.
 - 1. Diagnosis.
 - 2. Classification and pathogenesis.
 - 3. Clinical features.
 - 4. Complications.
 - 5. Treatment.
 - a. Diet.
 - b. Insulin.
 - c. Oral agents.
 - d. Hypoglycemia
 - 1. Fasting.
 - 2. Reactive.
- G. Disorders of the parathyroid gland and of calcium metabolism.
- H. Metabolic bone disease.
 - 1. Osteoporosis.
 - 2. Osteomalacia.
 - 3. Paget's.
 - 4. Renal osteodystrophy.
- II. History Skills
 - A. Demonstrates knowledge necessary to take a proper history for a patient suspected of having an endocrine or metabolic disorder.
 - B. 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
 - A. Know importance of:
 - 1. Weight.
 - 2. Height.
 - 3. Skeletal proportions.
 - B. Recognize exophthalmus and abnormal ocular motility.
 - C. Evaluate thyroid size, nodularity, tenderness, and bruit.
 - D. Evaluate skin-temperature, moisture, pigmentation, pretibial myxedema, diabetic dermopathy.
 - E. Evaluate quality of voice.
 - F. Evaluate texture and pattern of hair.
 - G. Recognize diabetic retinopathy.

IV. Diagnostic Skills

- A. Understand the use of thyroid function tests.
- B. Describe the tests necessary to diagnose diseases listed in 1.

V. Therapeutic Interventions

- A. Understand the indications, side effects, and adverse reactions for each of the following:
 1. L-thyroxin.
 2. Glucocorticoids.
 3. Antithyroid drugs.
 4. Oral hypoglycemics.
 5. Insulin (all forms).

GASTROENTEROLOGY AND HEPATOLOGY

I. Knowledge/Mix of Diseases/Patients

- A. Diseases of the esophagus: anatomic and motor causes of esophagitis (GERD).
- B. H Pylori and PUD.
- C. Disorders of absorption.
- D. Inflammatory bowel disease.
- E. Liver and biliary tract disease
 1. Acute and chronic hepatitis.
 2. Cirrhosis and alcoholic liver disease.
 3. Approach to patients with abnormal LFTs.
- F. Pancreatic diseases
 1. Acute pancreatitis.
 2. Chronic pancreatitis.
 3. Pancreatic cancer.
 4. Endocrine tumors.
- G. Large Bowel diseases
 1. Polyps and surveillance
 2. Chronic diarrhea
 3. Colon cancer and management

II. History Skills

In obtaining history from a patient with a GI complaint:

- A. Describe all characteristics of abdominal pain.
- B. Obtain a History in a methodical way and Create an appropriate differential diagnosis.
- C. Recognize potential importance of family history and medication history and GI side effects of all drugs.
- D. History of diet, weight, food intolerance, bowel pattern, and bleeding.
- E. Compare and contrast history of inflammatory bowel disease vs. irritable bowel syndrome.
- F. Precise history taking in GERD and dysphagia.

III. Physical Exam Skills

- A. Students must do complete exam of abdomen and rectal exam including:
 1. Auscultation for bowel sounds and bruits.

2. Percussion for liver size.
 3. Palpation for spleen.
- B. Recognize need for additional physical exam maneuvers such as:
1. Shifting dullness and fluid wave when ascites is suspected.
 2. Murphy's sign for right upper quadrant pain or tenderness.
 3. Eliciting signs of peritonitis.
 4. Perform rectal digital exam and check for fecal blood.

IV. Diagnostic Studies

- A. Know indications for paracentesis.
- B. Know indications for placement of nasogastric tube.
- C. Properly interpret the following laboratory tests:
 1. Serologic studies for viral and autoimmune hepatitis.
 2. Liver function tests.
- D. 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

I. Knowledge/Mix of Diseases/Patients

- A. Pathophysiology of anemia.
 - B. Anemia of chronic disease.
 - C. Iron deficiency anemia.
 - D. Megaloblastic anemia.
 - E. Hemolytic anemias (congenital and acquired).
 - F. Myeloproliferative disorders.
 - G. Leukemias (acute and chronic).
 - H. Lymphoma (Hodgkin's, non-Hodgkin's and plasma cell myeloma).
 - I. Clotting disorders
 1. Platelet and vessel wall.
 2. Coagulation and thrombosis.
3. Hypercoagulable state.

II. History Skills

- A. Knowing presenting signs of anemia.
- B. Recognize that dizziness, shortness of breath, headache, exercise intolerance, and sensitivity to cold may be presenting symptoms of anemia.
- C. Recognize that symptoms of angina, claudication, TIA may be unmasked by anemia.
- D. Recognize the value of reviewing all previous hematologic lab data in evaluation of hematologic disorders.
- E. Recognize symptoms of platelet disorders (spontaneous mucocutaneous bleeding, immediate bleeding with trivial trauma) versus symptoms of clotting-factor deficiency (delayed bleeding, deep muscular hematomas, and hemarthroses).
- F. Recognize the importance of "B" symptoms (fever, night-sweats, weight loss) in patients with lymphoma.

G. Recognize the importance of the family history in patients with anemia and coagulation disorders.

III. Physical Diagnosis Skills

- A. Recognize ecchymotic or petechial rash.
- B. Palpate all lymph node areas, spleen and liver.

IV. Diagnostic Skills

- A. Know the value of the following tests in the work-up of a patient with hemolytic anemia:
 1. Blood smear review.
 2. Reticulocyte count.
 3. Coombs test.
 4. Serum haptoglobin.
 5. Glucose 6 phosphate dehydrogenase deficiency.
 6. Hemoglobin electrophoresis.
 7. Urine hemosiderin.
- B. Know the proper evaluation for bleeding disorder.

V. Therapeutic Interventions

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

INFECTIOUS DISEASES

I. Knowledge/Mix of Diseases/Patients

- A. Clinical syndromes
 1. Gram-negative sepsis.
 2. Infective endocarditis.
 3. Upper and lower respiratory infections.
 4. Urinary tract infections.
 5. Soft tissue infection.
 6. Tuberculosis.
 7. Mycoplasma pneumonia.
- B. Viral infection
Various viral infections such as Influenza A, B, H1N1, Hepatitis, HIV and the latest COVID19.
- C. Fever of unknown origin.

II. History Skills

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

III. Physical Examination

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

- B. Recognize skin lesions which may provide diagnostic clues to etiology of infection.
- C. Recognize fever patterns and their possible diagnostic indications.
- D. Perform Kernig and Brudzinski tests in evaluating for meningitis.

IV. Diagnostic Tests

- A. Obtain sputum on patients with pneumonia.
- B. Interpret body fluid results (CSF, pleural, peritoneal, joint).

V. Therapeutic Interventions

- A. Choose appropriate antibiotic regimens for most common infections.
- B. Know major side effects of antibiotics.

RHEUMATOLOGY

I. Knowledge

- A. Clinical manifestations of SLE.
- B. Rheumatoid arthritis.
- C. Scleroderma.
- D. Mixed connective tissue disease.
- E. Sjogren's syndrome.
- F. Ankylosing spondylitis.
- G. Vasculitic syndromes.
- H. Sarcoidosis.
- I. Osteoarthritis.
- J. Psoriatic arthritis and arthritis associated with GI diseases.
- K. FMF.
- L. Behcet's disease.
- M. Gout.

II. History Skills

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

III. Physical Exam Skills

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

IV. Diagnostic Tests

The student should be able to:

- A. Know the basics of diagnostic joint aspiration.

B. Know when to order the following tests: rheumatoid factor, anti DNA, anti SM, anti RNP, anti RO (SSA), anti LA (SSB), ANCA, anti CCP.

V. Therapeutic Interventions

A. Know general treatment options for all diseases listed in

