Course Title: Clinical Medicine – Cardiology Module
Syllabus

Contact Information:
John N. Hamaty DO, FACC, FACOI, Noelle Folkman
Module Director Course Coordinator

Phone: 856-755-1173 Fax: 856-310-8921
Email: sjhgcardiofellowship@gmail.com
Website: www.sjhg.org

I. Course Overview/Description

A. Course Goals
The goal of the second year module will be to correlate academic and book knowledge with clinical cardiovascular patient care. You will be expected to translate your academic knowledge into practical clinical skills in caring for patients with cardiovascular diseases including coronary artery disease, vascular heart disease and hypertension. You will be expected to be able to make appropriate decision making processes diagnosing, evaluating and treating patients with cardiovascular disease utilizing standard techniques.

B. Course Objectives
At the end of the course the student will be able to:
1. Identify patients with cardiovascular risks.
2. Diagnose the more common cardiovascular states such as coronary artery disease, hypertension, dysrhythmias, and valvular heart disease.
3. Discuss the epidemiological, pathological and clinical manifestations as well as laboratory findings of cardiovascular disease patients.
4. Outline a therapeutic approach to form a diagnosis.
5. Apply the medical knowledge, practice based and systems based skills in order to develop a differential diagnosis and therapeutic treatment plan.
6. Develop interpersonal communication skills in handling cardiovascular patients.
7. Based on the above define a treatment plan for the patient.

II. Expectations of Students

A. Educational Sessions:
See one45 for detailed daily lecture schedule
B. **Small Group Discussion sessions:** as scheduled in one45; see Blackboard for Case descriptions

C. **Course Texts / Materials / Resources**

- Power Point presentations for lectures are available at www.sjhg.org
- Marriott’s Practical Electrocardiography. 10th Edition, 2011 Lippincott Williams & Wilkins

*Also available in free IPad App and e-book:*


III. **Attendance Policy**

A. **Class attendance:**

Attendance at class sessions is not required but highly recommended; attendance is mandatory for the Small Group sessions. Students unable to attend required classes due to illness or unforeseen circumstances must contact the Course Director and Office of Academic Affairs before scheduled class(es) or as soon as possible thereafter. A doctor’s note will be required when you return to school. This needs to be submitted to the Course Director and the Director of Academic Affairs. Courses/sessions that expect attendance may require students to sign in. It is a violation of the honor code to sign in for another student.

B. **Attendance at Exams**

Students are expected to take all exams during assigned times, as listed on the publicized course schedule. Any student who anticipates missing an examination must submit their request in writing to the Director of Academic Affairs, who will determine the validity of the excuse, in conjunction with the Course Director. If deemed valid, the request will be forwarded to Center for Teaching and Learning (CTL) to schedule/administer the make-up exam, in coordination with the course director. Please refer to the missed exam policy in the SOM Education handbook for more details.
C. Conferences

Students can request an excused absence for medical conferences from the Director of Academic Affairs, in conjunction with the Course Director, provided the student is not on Academic Warning status. Most times, excused absences will be limited to one day for a conference and one day for travel, as most student conferences are held on the weekends. Documentation of your role in the conference must be submitted with your request. **You must get permission before making your reservations and paying for the trip.**

D. Religious Holidays

We value the diversity of our student body and recognize that many students celebrate holidays that are important religious observations and are not included in our Academic Calendar. In order to provide flexibility for this, students must make the request to Jackie Giacobbe, the Director of Academic Affairs, at least one month prior. If the holiday or religion is not common, then it is the student’s responsibility to provide verification and explanation of the importance of the holiday to Academic Affairs. Academic Affairs will then inform the Course Director of the student’s need for absence.

IV. Grading Policy

Student grades are based on the following elements:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Written exam</td>
<td>95%</td>
</tr>
<tr>
<td>Small Group Discussions</td>
<td>5%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

A. Exam Review Policy

An exam review session will be scheduled; date/time to be determined.

B. Remediation

The final Cardiology module grade will be part of the overall Clinical Medicine course grade which will be determined by the average of all module grades (Prevention, Neurology/Musculoskeletal, Cardiology, Endocrinology, Pulmonary, Nephrology/Urology, Gastroenterology, Hematology/Oncology).

To pass the Clinical Medicine course, students must achieve a grade of 70 or greater for the overall course and not fail more than 3 modules in the course.

Students who achieve a final Clinical Medicine course grade of <70 or have a passing grade (≥70) but fail more than 3 modules in the course, fail the course but can remediate by taking a comprehensive re-examination. If the student passes re-examination then
he/she passes course and receives grade of RP. Students who fail re-examination, fail the course and must repeat the course next year.

V. Grade Appeals

A student who chooses to appeal a grade must contact the Course Director within 2 weeks of the grade being posted on One45. The appeal should be in writing via email or hard copy and sent to the Course Director, with a copy to the Course Administrator / Coordinator.

The Course Director has 2 weeks to make a determination about the grade appeal. If the student chooses to make a second appeal, it is made to the Department Chair, who will also make a determination within 2 weeks. A final appeal can be made to the Senior Associate Dean for Academic Affairs, and that decision is final.

VI. Dress Code

Professional appearance and attitude are essential to good doctor-patient relationships. Students are expected to maintain high professional standards of dress and behavior. If there are guest speakers and/or patient panels, you are expected to wear your white coat.

VII. Professional Conduct

Students are expected to follow the RowanSOM Honor Code of Professional Conduct presented on page 135 of the SOM Education Handbook


Clinical Experiences: Please be aware that you are being evaluated at all times. Clinical faculty, nurses and other office staff provide valuable 360° feedback to your course director. Therefore, you should always consider yourself “on” when working in an office.

All members of the clinical office staff are officially part of the patient’s care team, regardless of their role. When interacting with other professionals, students should be respectful of all team members, and work to recognize and value the contributions of each.

Verbal and written communication should be professional, formal and appropriate. Emails should be addressed in formal letter style, (e.g. “Dear Dr. Doe”) and should be addressed to both the clerkship director and the clerkship coordinator, who is often more accessible.

VIII. Course Evaluations

At the end of the course, students will be asked to complete online evaluations for both the overall course and the individual faculty members in One45. Student grades will not be released until all of these evaluations have been submitted. We ask that students
be honest and constructive in their comments. We take evaluations seriously and would like suggestions for improvement, as well as hearing about things that were appreciated. Your constructive evaluations help us to make our course better for the next students. Changes in the curriculum are made based on student feedback each year.

IX. Americans with Disabilities Act

Students with disabilities who need accommodations should register with Center for Teaching and Learning and provide documentation supporting their request and specifying the necessary accommodations. This should be done no later than two weeks before the accommodations are needed.

Attachment

Lecture titles and objectives

Lectures:

Lecture 1
Course Introduction/Introduction to Hemodynamics- John N. Hamaty DO, FACC, FACOI, FASE, FSNC
1. To understand the basics of cardiovascular hemodynamics including pressure tracing, blood pressure response, and cardiovascular hemodynamics.

Lecture 2
Introduction to Hemodynamics II- John N. Hamaty DO, FACC, FACOI, FASE, FSNC
1. To understand the basics of cardiovascular hemodynamics including pressure tracing, blood pressure response, and cardiovascular hemodynamics.

Lecture 3
ECG Part I- John N. Hamaty DO, FACC, FACOI, FASE, FSNC
1. To understand the EKG as the gold standard for detection of arrhythmias and ischemic heart disease.
2. You will learn to identify common EKG abnormalities including detection of ischemic heart disease, arrhythmias, acute myocardial infarction, and various conduction abnormalities.

Lecture 4
Auscultation and Vascular Heart Disease- Troy Randle DO, FACC
1. During this lecture you will be introduced to common cardiovascular auscultation techniques. The objective will be to learn basic valvular heart disease auscultation and diagnose with common valvulopathies.
2. This lecture will introduce you to the multiple valvular heart diseases that cardiovascular patients develop. You will be expected to learn cardiovascular examination diagnostic technique
recommendations and treatment of the common valvular heart disease including aortic stenosis, aortic insufficiency, mitral regurgitation and mitral stenosis.

**Lecture 5**
Echocardiography/ Pericarditis- Jerome M. Horwitz DO

1. You will understand the indications for ordering for echocardiography
2. You will learn to utilize echocardiography for the diagnosis of valvular heart disease as well as assessment of left ventricular systolic and diastolic function.
3. To understand fundamentals of efficacy of echocardiography of prognosis of ischemic heart disease.
4. To utilize echocardiography in the diagnosis of pericardial diseases.

**Lecture 6**
Hypertension/ Use of Antihypertensives- Joshua M. Crasner DO FACC, FACOI

1. The purpose of this lecture is to introduce you to the epidemiologic and treatment options in evaluating a patient with hypertension. You will learn medication utilization for hypertension. You will be exposed to the basic genetic patterns that are associated with hyperlipidemia. You will also learn to diagnose and rise stratify patients on abnormal patterns as well as their treatments

**Lecture 7**
ECG Part II- John N. Hamaty DO, FACC, FACOI, FASE, FSNC

1. To understand the EKG as gold standard for detection of arrhythmias and ischemic heart disease.
2. You will learn to identify common EKG abnormalities including detection of ischemic heart disease, arrhythmias, acute myocardial infarction, and various conduction abnormalities

**Lecture 8**
Stress Testing/ Nuclear Echo- John N. Hamaty DO, FACC, FACOI, FASE, FSNC

1. The objective of this lecture is to understand the basics of stress testing in determining risk stratification and prognosis for patients with coronary artery disease. Next you will learn the differences in several types of stress testing and their indications and contraindications. You will learn the difference between ordering a nuclear stress test versus a stress echocardiogram.

**Lecture 9**
Acute MI/ Complication of MI- Hafeza Shaikh, DO

1. The purpose of this lecture will be to introduce you to the pathogenesis of acute myocardial infarction. You will learn the common presenting sign and symptoms. You will be introduced to a fundamental treatment approach to myocardial infarction.
2. Myocardial infarction is associated with several complications including heart failure and cute valvular heart disease. You will learn to recognize and treat these common complications.

**Lecture 10**
Congestive Heart Failure- Howard M. Weinberg DO FACC

1. During this lecture you will learn to describe the incidence and prevalence of heart failure.
2. You will be able to list the common etiologies of heart failure and define the compensatory mechanisms that occur due to heart failure.
3. You will be able to identify current assessment and treatment modalities for heart failure patients.

**Lecture 11**
Congenital Heart Disease- John N. Hamaty DO, FACC, FACOI, FASE, FSNC

1. The objective for this lecture will be to teach you more common congenital heart disease abnormalities that occur not only in children but as well as adult congenital heart disease.
2. You will be expected to know the most common abnormalities that take place, the genetic predisposition as well as the familial association. Lastly, you will be expected to understand the more common adult congenital heart disease presentations that occur; your ability to diagnose and subsequently treat these disease entities.
1. This time will be utilized to discuss any remaining questions you may have from the module. This will be your opportunity to clarify the material that was presented over the past four weeks as well as discuss the examination outline and procedure.