Course specification of Hepatology Medicine for Hepatology medicine master

A- Administrative Information
Course Title: Hepatology Medicine
Code: HEPT718
Department giving the course: Hepatology Medicine department
Program on which the course is given: Master of Hepatology Medicine
Department offering the Program: Hepatology Medicine department
Academic level: 2nd part
Date of specification: 2011
Date of approval by Departmental and Institute Council: 2011

B- Professional Information
1 – Overall aims of course:
Be oriented to the causation, pathogenesis, clinical features, diagnosis, management, and control of hepatological and gastrointestinal diseases. Know the line of treatment and prophylaxis of each disease. 1-b)
1-c) Be oriented to the basic interventions at the field of hepatology and gastroenterology as endoscopy and ultrasonography.

2- Intended Learning Outcomes (ILOs)
a- Knowledge and Understanding
a-1) Describe different viral, bacterial and parasitic disease. Demonstrate knowledge and skills in diagnostic parasitology & microbiology and other simple laboratory methods related to Hepatology medicine.
a_2 Distinguish different types of laboratory as well as imaging investigations needed for the diagnosis of hepatobiliary disorders. a-3). List the drugs used in the management of hepatobiliary disorders as well as in management of liver transplant recipients; their indications, actions and monitoring & complications a-4). Recognize the socioeconomic background of liver diseases. a-5) Define different types of vaccines.
a-6) Explain the basic physiology of immune system as well as GIT & liver physiology.
a-7) Apply basic epidemiological principles, including selecting an appropriate study design to address a given clinical question.
a-8) Describe the causation, pathogenesis, clinical features, diagnosis, management, and control of hepatological and gastrointestinal diseases.
a-9) Demonstrate the principles about GIT endoscopy and their applications.

b- Intellectual Skills
b-1) Apply different types of investigations to reach the diagnosis.
b-2) Apply full clinical skills in optimal manner so as to reach the diagnosis.
b-3) Suggest differential diagnosis and the provisional diagnosis.
b-4) Suggest provisional diagnosis after taking full history of the patient.
b-5) Conclude the final diagnosis.
b-6) Design and conduct medical research in the field of Hepatology, Gastroenterology or Infectious Diseases.

C- Professional and Practical Skills
At the end of the course the graduate should be able to:
c-1) Differentiate between hepatobiliary disorders of common presentation and proper selection of lab investigation and imaging modality.
c-2) Perform diagnostic and therapeutic procedures considered essential in the field of Hepatology Medicine and Gastroenterology.
c-3) Perform abdominal u/s.
c-4) Perform safely upper and lower gastro intestinal endoscopy.
c-5) Evaluate medical methods and tools used in Hepatology medicine.
c-6) Write and evaluate a professional medical report related to infectious dis.

d- General and Transferable Skills
By the end of the course, the students should be able to:
d-1) Increase their clinical sense.
d-2) Proper history taking from the patient and treat them.
d-3) Perform continuous medical education.
Perform abdominal u/s and upper and lower gastro intestinal endoscopy.

3- Course contents:
Clinical infectious diseases which includes:
1. Acute & chronic viral hepatitis.
2. Pathogenesis of microbial diseases and parasitological diseases of hepatobiliary system.
4. Antimicrobial therapy.

**Clinical Hepatology & gastroenterology.**
1. Basic anatomy, histology and physiology of the liver.
2. Liver cirrhosis.
3. Portal hypertension
4. Hepatic encephalopathy
5. Autoimmune liver diseases.
6. Vascular liver diseases.
8. Diseases of the biliary tree and gall bladder.
9. Primary biliary cirrhosis, sclerosing cholangitis & other biliary disorders
10. Wilson disease
11. Haemochromatosis
12. A1 antitrypsin deficiency
13. Liver transplantation
14. Disorders of the esophagus and gastroesophageal junction
2 Peptic ulcer
3 Diarrhea and Dysentery
4 Upper GIT bleeding
5 Ascites and peritoneal disease
6 Inflammatory bowel disease
7 Malabsorption syndrome
8 Disorders of GI motility
9 Focal hepatic lesions
10 Disorders of the pancreas

<table>
<thead>
<tr>
<th>Topic</th>
<th>Theoretical hours</th>
<th>Laboratory/Practical</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical infectious diseases</td>
<td>55</td>
<td>60</td>
<td>115</td>
</tr>
<tr>
<td>Clinical hepatology:</td>
<td>55</td>
<td>60</td>
<td>130</td>
</tr>
<tr>
<td>Clinical gastroenterology</td>
<td>55</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td>Total hours</td>
<td>165</td>
<td>180</td>
<td>345</td>
</tr>
</tbody>
</table>

4) Teaching and learning methods
   a. Lectures.
   b. Clinical rounds.

5) Student assessment methods:
   5.1- Written Examination for assessment of knowledge and understanding and intellectual skills
   5.2- Oral Examination for assessment of knowledge and understanding outcomes, intellectual skills, general skills and attitude.
   5.3- Practical Examination for assessment of practical and intellectual skills

Assessment schedule:
Two written exams 3 hours each in Hepatology Medicine + clinical exam and oral exams

Weighting of assessment:
Written exam: 60%
Oral exam: 20%
Clinical exam: 20%
Total: 100%
Total 600 marks

Regulations
The head of the department should allow the student to undergo the final examination when he/she complete their training program and collect the credit points needed

Applied Knowledge Exam

Exam structure:
The applied knowledge examination consists of two written papers that will include case studies
Paper 1 (3 hours): composed of a written paper including short answer • essay questions (300 marks)
Paper two (3 hours): composed of a written paper including short • answer essay questions (300 marks)
The clinical exam
This is the final clinical examination. Each candidate has one chance to pass this exam.

Pre-requisites to be eligible to sit for the clinical exam
Candidates must complete the following
- Complete the whole training program successfully.
- Pass successfully the written exam (applied knowledge exam).
- Submit her/his logbook and portfolio for final assessment and both approved by the Hepatology department scientific council.

The examination consists of four components:
A. Long Clinical Case: This component tests the ability of the candidate to obtain data from history taking and clinical examination, to present and interpret these data, to discuss patient management and to demonstrate appropriate attitudes. The candidate will be required to take a history and examine the patient while being observed by two examiners who will not interfere. Subsequently, the candidate will orally present the findings and discuss clinical data and proposed patient management. Scoring is based on a predetermined weight for each component of the exam (150 marks).

B. Diagnostic tools: This component tests the ability of the candidate to diagnose the cases based on clinical examination, to interpret these data to demonstrate appropriate acquired professional skills and attitudes. Scoring is based on a predetermined criteria and model answers (50 marks).

C. Oral exam: This component tests the ability of the candidate to acquire knowledge about the topics included in the curriculum. Scoring of this test will be based on the evaluation of the committee of Hepatology specialties (200 marks).

6. List of references:
- the slides of the attending professor and handout of lectures
- Essential books (text books)
  - Cecil’s textbook of internal medicine
  - Clinical Medicine KUMMAR and CLARK.
  - DAVIDSON'S Principles and Practice of Medicine
  - Washington Manual of medical therapeutics
  - Oxford Handbook of medical therapeutics
  - HUTCHISON’S Clinical methods
- Recommended books
  - Handbook of liver disease Lawrence S.Friedman
1000 MCQs for DAVIDSON'S Principles and Practice of Medicine
KUMMAR and CLARK MCQ

6.4- Periodicals, Web sites, etc
Clin Liver Dis journal.
Journal of Gastroenterology
J Hepatol journal.
J Gastroenterol Hepatol
www.emedicine.com
www.pubmed.com
www.nejm.org
www.bmj.com

7- Facilities required for teaching and learning to achieve the above ILOs as field trips to liver hospitals, Data show, Computers, Laboratories instruments, Internet club.

We certify that all of the information required to deliver this course is contained in the above specification and will be implemented

Course coordinator: Prof.Dr.Eman Rewsha