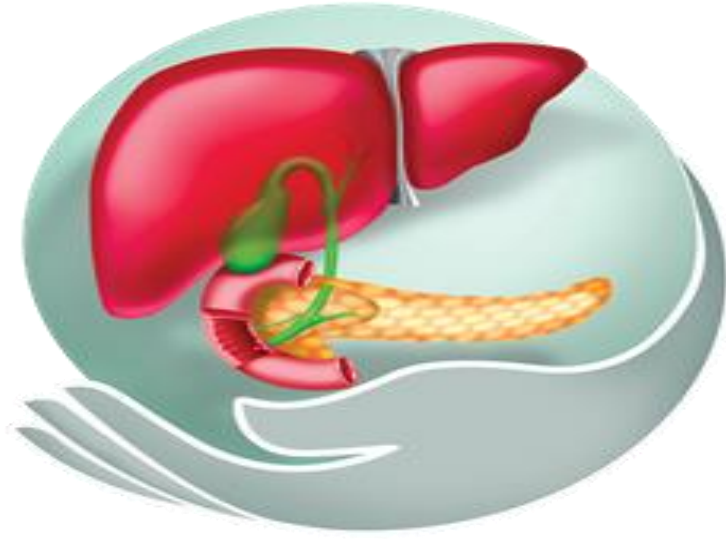


# Professional Diploma in Hepato-Pancreatico-Biliary Medicine Portfolio



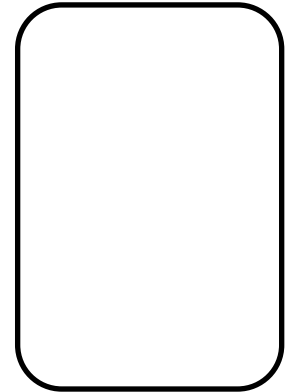
" ملف الإنجاز "

اللازم لحصول المتدرب على دبلومة مهنية فى طب الكبد والبنكرياس  
والجهاز المراري  
٢٠٢٠ - ٢٠٢٢

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Personal photo



**Name**.....  
**Date of birth**.....  
**Address**.....  
**Place of work**.....  
**Telephones**..... **Mobile phone(s)**.....  
**E mail**.....

Name of hospital	Period of work	Hospital director signature

**Academic Information**

MBBCh...../...../..... University ..... Grade .....  
 MSc..... University..... Grade .....  
 MD degree ..... University..... Grade .....  
 Others...../...../..... .....University

## Portfolio Appraisal: Documentation of experiences & reflection

### Summary

*This Portfolio will be used for appraisal and review of:*

- Your **progress on the course.**
- Your **attitudes and behavior.**
- It facilitates self-evaluation and review of your professional development which is necessary for a career in medicine.
- It is part of the professional practice of all doctors to keep a portfolio recording their experience and to engage in appraisal.

### Overall Goals

*Your portfolio should help you:*

- Monitor your progress in relation to course objectives.
- Reflects systematically on your progress and development.
- Set future personal development targets.
- Prepare you for the appraisal process.

### \* Aim of the activities book

To provide one source of evidence for the assessment committee that you attained the desired level of competency required to gain the award.

In this book you will document all clinical, academic and other experiences and skills you attained during your training.

## **Sections of the book** **For each module / course / rotation**

You should fill the following sections:-

### **1- Clinical case log**

1- You will first find a list with all required cases in the concerned module and the minimum number of cases you must get exposed to and level of participation you should achieve for each type of cases.

2- You should record all clinical cases in the module and each case should be signed by your trainer.

### **2- Clinical case presentation log**

Record the cases related to the module that you have presented in a seminar of the activity.

### **3- Procedures / operations log**

1- You will find a list of required procedures, diagnostic – therapeutic operations and level of desired performance you should achieve at the end of training.

2- You will find empty tables to write down the procedure, your level of participation and date and signature of supervisor.

### **4- Rotation / attendance proof**

You should have evidence of achievement of the required training hours within each module.

*For the whole program fill the following sections*

1- Academic activities

A- Document all academic activities, e.g. lecture, journal clubs, workshops, conference, services attended. This documentation should include the level of participation "attendance, preparation, presentation,"

2- Academic achievements

A- Document all outcomes you achieved.

## The program aims

- 1-1- To enable candidates to acquire a satisfactory level of clinical skills, bedside care skills, in addition to update medical knowledge as well as clinical experience and competence in the area of Hepato-pancreatico-biliary and Liver Transplant Medicine and enabling the candidates of making appropriate referrals to a sub-specialist.
- 1-2- Provide candidates with fundamental knowledge and skills of dealing with critically ill patients, with Hepato-pancreatico-biliary and Liver Transplant Medicine fundamentals.
- 1-3- To introduce candidates to the basics of scientific medical research.
- 1-4- Enable candidates to start professional careers as specialists in Egypt, but recognized abroad.
- 1-5- To enable candidates to understand and get the best of published scientific research and do their own.

## Curriculum Structure:

Duration of program 2 years

## Program Structure

### Program Time Table

#### 1- Duration of program 2 years divided into:

- **1<sup>st</sup> Semester: (6 month).**
  - Program-related basic science modules and ILOs+ elective Module.
  - Students are allowed to sit the exams of these modules at the end of the semester.
- **2<sup>nd</sup> Semester: (6 month)**
  - Program-related clinical supportive science modules.
  - Students are allowed to sit the exams of these modules at the end of the semester.
- **3<sup>rd</sup> and 4<sup>th</sup> Semesters: (1 year ).**
  - Program –related speciality modules and ILOs
  - Students are allowed to sit the exams of these modules at the end each semester.

#### Graduations and exams

The students pass if they get 50% from the written exams and 60% from oral and clinical/practical exams of each module and 60% of summation of the written exams, oral and clinical/practical exams of each module.

# First semester Modules

## Basic Science Track

1. Anatomy
2. Physiology
3. Microbiology and immunology
4. Pharmacology
5. Pathology
6. Clinical Pathology and molecular biology (genetics)
7. Basic nutrition
8. Statistics and Research methodology
9. Evidence based Medicine
10. Information technology

## Elective Modules Track

### One of the following

1. Hospital Administration
2. Infection Control
3. Medical Ethics

## Anatomy Module (I-1)

Credit Points	Hours for student Workload/Semester					Total Hours
	Lecture	Practical/ Clinical	Homework	Test Preparation	Other Private study	
2 CP	15 (5 lectures)	-	--	45	-	60
Percentage %	25%			75%		100%

Name of the course	Credit points	Responsible department	Attendance	Percentage of Achieved points
Anatomy	0.5	Anatomy Department in conjunction with Tropical Medicine and Gastroenterology Department/ Gastroenterology Unit, Internal Medicine Department	15 hours 5 lectures - Liver anatomy - Pancreas - Biliary anatomy - Abdominal vasculature - Congenital anomaly	25%
Student signature			Principle coordinator signature	Program Academic Director signature



**Anatomy (Lectures)**

Date	Attendance	Topic	Signature

## Physiology Module (I-2)

Credit Points	Hours for student Workload/Semester					
	Lecture	Practical/ Clinical	Homework	Test Preparation	Other Private study (Seminar)	Total Hours
3 CP	15 hours (5 lectures)	--	--	60	15	90
Percentage %	16.5%	--	--	66.8%	16.7%	100

Name of the course	Credit points	Responsible department	Attendance	Percentage of Achieved points
Physiology	0.5	Physiology Department in conjunction with Tropical Medicine and Gastroenterology Department/ Gastroenterology Unit, Internal Medicine Department	15 hours 5 lectures <ul style="list-style-type: none"> <li>- liver function with details of role of liver in metabolism</li> <li>- Exocrine function of pancreas</li> <li>- Endocrine function of the pancreas</li> <li>- Bile synthesis, secretion and its function</li> </ul>	16.5%
	0.5		15 hours <ul style="list-style-type: none"> <li>- Seminar</li> </ul>	16.5%
Student signature			Principle coordinator signature	Program Academic Director signature

### Physiology (Lectures)

Date	Attendance	Topic	Signature

### Seminars log

Date	** Your role	Topic	Signature

\*\* Your role:-

- A- Attendance
- B- Organization
- C- Presentation

## Microbiology and Immunology (I-3)

Credit Points	Hours for student Workload/Semester					
	Lecture	Practical/ Clinical	Homework	Test Preparation	Other Private study (Seminar)	Total Hours
5 CP	30 hours (10 lectures)	-	-	90	30	150
Percentage%	20%			60%	20%	100%

Name of the course	Credit points	Responsible department	Attendance	Percentage of Achieved points
Microbiology and Immunology	1	Microbiology and Immunology Department in conjunction with Tropical Medicine and Gastroenterology Department/ Gastroenterology Unit, Internal Medicine Department	30 hours 10 lectures  - Principles of immune response - Viral Infections - Bacterial infections - Fungal infection - Transplantation immunology - Tumour immunology - Immunological Tolerance	20%
	1		30 hours - Seminar	20%
Student signature			Principle coordinator signature	Program Academic Director signature

### Physiology (Lectures)

Date	Attendance	Topic	Signature

### Seminars log

Date	** Your role	Topic	Signature

\*\* Your role:-  
 A- Attendance  
 B- Organization  
 C- Presentation

## Pharmacology Module (I-4)

Credit Points	Hours for student Workload/Semester					
	Lecture	Practical/ Clinical	Homework	Test Preparation	Other Private study (Seminar)	Total Hours
4 CP	30 hours (10 lectures)	-	-	75	10	120
Percentage %	25%	-	-	56.7%	8.3 %	100%

Name of the course	Credit points	Responsible department	Attendance	Percentage of Achieved points
Pharmacology	1	Pharmacology Department in conjunction with Tropical Medicine and Gastroenterology Department/ Gastroenterology Unit, Internal Medicine Department	30 hours 10 lectures - Drug resistance - chemoprophylaxis - Drugs used in portal hypertension - Antiviral agents - Chemotherapeutic agents - Immunosuppressive drugs	25%
	0.33		30 hours - Seminar	8.3%
Student signature			Principle coordinator signature	Program Academic Director signature





## Pathology Module (I-5)

Credit Points	Hours for student Workload/Semester					
	Lecture	Practical/ Clinical	Homework	Test Preparation	Other Private study (Seminar)	Total Hours
<b>4 CP</b>	<b>30 hours (10 lectures)</b>	-	-	<b>60</b>	<b>30</b>	<b>120</b>
<b>Percentage%</b>	<b>25%</b>	-	-	<b>50%</b>	<b>25%</b>	<b>100%</b>

Name of the course	Credit points	Responsible department	Attendance	Percentage of Achieved points
Pathology	1	Pathology Department in conjunction with Tropical Medicine and Gastroenterology Department/ Gastroenterology Unit, Internal Medicine Department	30 hours 10 lectures – Pathology of hepatitis (acute and chronic) – Pathology of cirrhosis – Pathology of pancreatitis (acute and chronic) – Pathological aspects pancreatic tumors – Pathology of HCC	25%
	1		30 hours – Seminar	25%
Student signature			Principle coordinator signature	Program Academic Director signature



## Clinical Pathology & molecular biology Module (I-6)

Credit Points	Hours for student Workload/Semester					
	Lecture	Practical/ Clinical	Homework	Test Preparation	Other Private study Seminar	Total Hours
4 CP	15 hours (5 lectures)	-	-	75	30	120
Percentage%	12.5%			62.5%	25%	100%

Name of the course	Credit points	Responsible department	Attendance	Percentage of Achieved points
Clinical Pathology & molecular biology	0.5	Clinical Pathology Department in conjunction with Tropical Medicine and Gastroenterology Department/ Gastroenterology Unit, Internal Medicine Department	15 hours 5 lectures - Interpretation of liver function tests - Interpretation of viral hepatitis marker - Interpretation of ascitic fluid - Bacteriologic reports - Interpretations of autoimmune diseases - Tumor markers of hepato-biliary pancreatic tumors - Genetic aspects of metabolic liver disease	12.5%
	1		30 hours - Seminar	25%
Student signature			Principle coordinator signature	Program Academic Director signature



## Basic Nutrition Module (I-7)

Credit Points	Hours for student Workload/Semester				
	Lecture	Practical/ Clinical	Test Preparation	Journal Club (Critical Appraisal of scientific articles related to nutrition)	Total Hours
2 CP	24 hours (12 lectures)	10 hours	22 hours	4 hours	60 hours
Percentage %	40 %	16.7%	36.7%	6.6%	100%

Name of the course	Credit points	Responsible department	Attendance	Percentage of Achieved points
Basic nutrition	0.8	Public Health and Community Medicine Department in conjunction with Tropical Medicine and Gastroenterology Department/ Gastroenterology Unit, Internal Medicine Department	24 hours (12 lectures) <ul style="list-style-type: none"> <li>- Effect of chronic liver diseases on nutritional status and metabolism</li> <li>- Assessment of nutritional status in hepatic patients</li> <li>- Apply knowledge to calculate the nutrient requirements for hepatic patients</li> <li>- Nutritional therapy in NAFLD/NASH</li> <li>- Nutrition in acute liver disease</li> <li>- Nutritional guidelines in liver injuries</li> <li>- Nutrition in compensated liver cirrhosis and End-Stage Liver Disease.</li> <li>- Applied nutrition in patients with pancreatitis (both acute and chronic)</li> <li>- Nutrition in Gallbladder Diseases (stone &amp; Cholestasis)</li> <li>- Nutritional needs and interpretation in surgical patients (perioperative and postoperative) in hepato-biliary system</li> <li>- Role of parenteral nutrition in hepatic patients</li> </ul>	40 %
	0.33		10 hours (Practical) <ul style="list-style-type: none"> <li>- Obtain proper history and examine patients in caring and respectful behaviors.</li> <li>- Apply practical skills in the assessment of nutritional status of patients with hepatic-biliary pancreatic diseases.</li> <li>- Apply evidence based knowledge to calculate total energy requirements of hepatic patients based on their physiological &amp; nutritional states.</li> <li>- Apply different nutrition protocols for short and long term nutrition management of different hepatic-biliary pancreatic diseases.</li> </ul>	16.7%
	0.13		4 hours (Journal club)	6.6%
Student signature			Principle coordinator signature	Program Academic Director signature



## Basic nutrition | (Lectures)

Date	Attendance	Topic	Signature

## Practical

Date	*Level of competency	Topic	Signature

\* Level of competency

- A- Independent performance
- B- Performance under supervision
- C- Observed

## Journal club log (Critical Appraisal of scientific articles related to nutrition)

Date	Your Role*	Topic	Signature

\*\* Your role:-

- A- Attendance
- B- Organization
- C- Presentation

## Statistics and Research Methodology (I-8)

Credit Points	Hours for student Workload/Semester					
	Lecture	Practical / Clinical	Homework	Test Preparation	Other Private study	Total Hours
1 CP	14 hours (7 lectures)	<b>20</b> hours	6	20	-	60
Percentage%	23.3%	33.3%	10%	33.3%		100%

Name of the course	Credit points	Responsible department	Attendance	Percentage of Achieved points
Statistics and Research Methodology	0.25	Community Medicine Department & Statistic and Insurance Department	14 hours (7 lectures) <ul style="list-style-type: none"> <li>- Basic statistical definitions in medicine</li> <li>- Sampling methods and Sample size</li> <li>- A brief introduction to SPSS</li> <li>- Key terms related to data analysis</li> <li>- Selecting the appropriate statistical method for data analysis</li> <li>- Interpreting inferential statistics</li> <li>- Statistical methods for difference research questions</li> <li>- Univariate Statistical methods for Associational research questions</li> <li>- Multivariate statistical Methods for Associational research questions</li> <li>- Multiple Regression</li> <li>- Logistic Regression</li> </ul>	23.3%
	0.3		20 hours Practical <ul style="list-style-type: none"> <li>- Use statistical package to manipulate and analyze medical data.</li> <li>- Use sampling software to calculate and select the appropriate sample size.</li> <li>- Apply the scientific approach to select the appropriate statistical method.</li> </ul>	33.3%
	0.1		6 hours Homework	10%
Student signature			Principle coordinator signature	Program Academic Director signature



### Practical

Date	* Level of competency	Topic	Signature

### Homework

Date	* Level of competency	Topic	Signature

\* Level of competency  
 A- Independent performance  
 B- Performance under supervision  
 C- Observed

## Evidence based medicine (I-9)

Credit Points	Hours for student Workload/Semester				
	Lecture	Practical/ Clinical	Test Preparation	Journal club Assignment	Total Hours
1CP	6 hours (6 lectures)	9 hours	9 hours	6 hours	30 hours
Percentage %	20 %	30	30%	20%	100%

Name of the course	Credit points	Responsible department	Attendance	Percentage of Achieved points
Evidence based medicine	0.2	- Education development center	6 hours (6 lectures) <ul style="list-style-type: none"> <li>- Introduction to Evidence-based Medicine. Posing questions and running searches in PubMed.</li> <li>- How to search the clinical evidence:</li> <li>- How to appraise evidence about interventions</li> <li>- How to appraise evidence on harm</li> <li>- How to appraise evidence about diagnostic tests</li> <li>- How to assess evidence from systematic reviews</li> </ul>	20 %
	0.3		9 hours (Practical) <ul style="list-style-type: none"> <li>- Formulate clinical questions and make them answerable. in a scientific way.</li> <li>- Search for and select relevant literature for scrutinizing and critical appraisal.</li> <li>- Evaluate simple numerical results.</li> <li>- Apply relevant clinical evidence in clinical practice.</li> </ul>	30%
	0.2		6 hours <ul style="list-style-type: none"> <li>- Journal club</li> </ul>	20%
Student signature			Principle coordinator signature	Program Academic Director signature





## Practical

Date	*Level of competency	Topic	Signature

\* Level of competency

- A- Independent performance
- B- Performance under supervision
- C- Observed

## Journal club log (Critical Appraisal of scientific articles related to evidence bases medicine)


Date	Your Role*	Topic	Signature

\*\* Your role:-

- A- Attendance
- B- Organization
- C- Presentation

## Information Technology [1-10]

Credit Points	Hours for student Workload/Semester					
	Tutorial	Practical	Homework	Test Preparation	Other Private study	Total Hours
1 CP	2 hours (Tutorial)	22 Hours	6	-	-	30
Percentage%	6.7%	73.3%	20%	0%	0%	100%

Name of the course	Credit points	Responsible department	Attendance	Percentage of Achieved points
Information Technology	0.1	 Electrical Engineering Department in conjunction with Diploma coordinators.	<ul style="list-style-type: none"> <li>- Computer essentials</li> <li>- Online essentials</li> <li>- Word processing</li> <li>- Spreadsheets</li> <li>- Presentation</li> <li>- Citation management tools (mendeley or endnote)</li> <li>- It security</li> <li>- Hospital information system (his)</li> </ul>	<b>6.7%</b>
	0.7		<ul style="list-style-type: none"> <li>- Identify and protect from common security challenges, and operate safely when online</li> <li>-Use the essential concepts and skills relating to web browsing, effective information search, online communication, e-mail and accessing the medical databases.</li> <li>- Apply practical skills in Using the advanced features of word processing applications to enhance work, improve productivity and save time.</li> <li>-Use a spreadsheet application, perform tasks associated with developing, formatting, modifying and using a spreadsheet, using standard formulas and functions, and competently create and format graphs or charts.</li> <li>-Handle a list of references or citations quite easily and effectively and thereby save on time.</li> <li>- Use Hospital information system (HIS) to allow health care providers to do their jobs effectively.</li> </ul>	<b>73.3%</b>
	0.2		6 hour (Homework)	<b>20%</b>
Student signature			Principle coordinator signature	Program Academic Director signature



### Practical

Date	* Level of competency	Topic	Signature

### Homework

Date	* Level of competency	Topic	Signature

\* Level of competency  
 A- Independent performance  
 B- Performance under supervision  
 C- Observed

# Elective Track

● The student chooses one of these courses

1. Hospital Administration
2. Infection control
3. Medical Ethics

Name of the elective course: -----

## Elective Course Lectures

Date	Attendance	Topic	Signature





# Second Semester Modules

## Clinical supportive sciences

- 1- Basic Hepatology
- 2- Imaging
- 3- Intensive care patient management
- 4- Basic Endoscopy

## Basic Hepatology Module (II-1)

Credit Points	Student Workload/Semester (15 weeks)					
	Lecture	Practical/ Clinical	Homework	Test Preparation	Other Private study (Seminar)	Total Hours
<b>10 CPS</b>	<b>30 H (10 Lect)</b>	<b>120 H 20 days)</b>	-	<b>90 H</b>	<b>60 H</b>	<b>300 H</b>
<b>Percentage%</b>	<b>1 CP 10%</b>	<b>4 CPS 40%</b>		<b>3 CPS 30%</b>	<b>2 CPS 20%</b>	<b>100%</b>

Name of the course	Credit points	Responsible department	Attendance	Percentage of Achieved points
Basic Hepatology	1	- Internal medicine in conjunction with Tropical Medicine and Gastroenterology.	30 (10 Lecturs )	10%
	2		60 hours Seminar	20%
	4		Clinical 120 Hours (20 days)	40%
Student signature			Principle coordinator signature	Program Academic Director signature

**( Lectures)**

Date	Attendance	Topic	Signature

**Clinical case log**

Date	Diagnosis of case	Level of participation *	Location	Signature of supervisor

- \* Level of participation  
A- Plan and carry out  
B- Carry out  
C- Carry out under supervision

**Clinical case log**

Date	Diagnosis of case	Level of participation *	Location	Signature of supervisor

\* Level of participation  
A- Plan and carry out  
B- Carry out  
C- Carry out under supervision

### Clinical case log

Date	Diagnosis of case	Level of participation *	Location	Signature of supervisor

\* Level of participation  
 A- Plan and carry out  
 B- Carry out  
 C- Carry out under supervision



**Rotation and attendance in Units**

Date From ---- to----	Unit	Duration	Signature of supervisor

### Out Patient Clinic

Date / Duration from -to	Name of Clinic	Signature of supervisor

## Clinical Seminars

### Requirements:




- Attendance of at least 10 Seminars
- Presentation of at least one case in the seminar

### Attendance

Date	Attendance	Topic	Signature



## Procedures log book

 <b>Observe (C):</b>	 <b>Perform under supervision(B):</b>
<ul style="list-style-type: none"> <li>• 5 Diagnostic Abdominal paracentesis</li> <li>• 5 Therapeutic Abdominal paracentesis</li> <li>• 20 Abdominal US (Under supervision).</li> </ul>	<ul style="list-style-type: none"> <li>• 5 Abdominal paracentesis</li> <li>• 5 Therapeutic Abdominal paracentesis</li> <li>• 20 Abdominal US (Under supervision).</li> </ul>
 <b>Independently Perform (A)</b>	
<ul style="list-style-type: none"> <li>• 5 Therapeutic Abdominal paracentesis.</li> <li>• 20 Abdominal US</li> </ul>	

### Procedure logs

Date	Diagnosis of case	Procedure	Level of competency *	Location	Signature of supervisor

\* Level of competency  
A- Independent performance  
B- Performance under supervision  
C- Observed

## Procedure logs

Date	Diagnosis of case	Procedure	Level of competency *	Location	Signature of supervisor

\* Level of competency  
 A- Independent performance  
 B- Performance under supervision  
 C- Observed

## Imaging Module (II-2)

Credit Points	Hours for student Workload/Semester					
	Lecture	Practical/ Clinical	Homework/ Assignment	Test Preparation	Other Private study (Workshop or conference)	Total Hours
<b>5 CP</b>	<b>21 Hours 8 Lect</b>	<b>60 hours 10 days</b>	-	<b>50 H</b>	<b>19 H</b>	<b>150 H</b>
<b>Percentage%</b>	<b>14%</b>	<b>40%</b>	-	<b>33.3%</b>	<b>12.7%</b>	<b>100%</b>



Name of the course	Credit points	Responsible department	Attendance	Percentage of Achieved points
Imaging Module	0.7	- Radiology Department in conjunction with Diploma coordinators.	21 Hours (8 Lectures) - Basic and physics of abdominal ultrasound -Indication, contraindication of Abdominal US, CT scan, MRI, angiography and PET scan -US of Normal liver, hepato-biliary channels, and pancreas - Doppler assessment of the porto-systemic circulation -Echofree, hypoechoic , hyperechoic lesions - US of diffuse and focal pathology of liver, biliary channels and pancreas - CT scan of Normal liver, biliary channels, and pancreas MRI of normal liver, biliary channels and pancreas -Arteriography: indication, contraindications, complications, - focal lesions, diffuse hepatic diseases, therapeutic infusion - Radiological features of Diffuse liver diseases. - Radiological features of focal liver lesions - Radiological features of Hepatic cysts.- Radiological features of vascular liver disease. - Radiological features of Malignant liver tumors. - Radiological features of biliary channels obstruction - Radiological features of Pancreatitis (acute& chronic) - Radiological features of Gallstone disease and Choledocholithiasis - Radiological features of Benign and malignant biliary strictures - Radiological features of Cystic lesions of the pancreas - Radiological features of Pancreas adenocarcinoma and ampullary cancer - Radiological features of Neuroendocrine tumors of pancreas	14%
	2		19 hours Workshop or conference	12.7%
	0.6		Clinical (60 hours) (10 days)	40%
	Student signature		Principle coordinator signature	Program Academic Director signature

**(Lectures)**

Date	Attendance	Topic	Signature

## Reporting of Abdominal Ultrasound and Doppler US

Diagnosis	Supervisor's opinion	Supervisor Signature

## Reporting of Abdominal CT scan

Diagnosis	Supervisor's opinion	Supervisor Signature

## Reporting of Abdominal MRI

Diagnosis	Supervisor's opinion	Supervisor Signature

## Conferences and Workshops

### Requirements:

- Attendance of at least 1 workshop or conference

### Attendance

Date	Attendance	Topic	Signature

## Case or Topic presentation in the conference

Date	Case/ Topic	Signature

## Procedures log book

### ✚ Abdominal US

<b>✚ Observe (C):</b>	<b>✚ Perform under supervision(B):</b>
<ul style="list-style-type: none"> <li>• Diagnostic Abdominal US 20</li> <li>• Doppler US on liver vasculature 10</li> </ul>	<ul style="list-style-type: none"> <li>• Diagnostic Abdominal US 20</li> <li>• Doppler US on liver vasculature 10</li> </ul>
<b>✚ Independently Perform (A)</b>	
<ul style="list-style-type: none"> <li>• Diagnostic Abdominal US 20</li> <li>• Doppler US on liver vasculature 10</li> </ul>	
<b>✚ Abdominal CT</b>	
<b>✚ Observe interpretation(C):</b>	<b>✚ Interpret under supervision(B):</b>
<ul style="list-style-type: none"> <li>• Abdominal CT 10</li> </ul>	<ul style="list-style-type: none"> <li>• Abdominal CT 10</li> </ul>
<b>✚ Independently Interpret (A)</b>	
<ul style="list-style-type: none"> <li>• Abdominal CT 10</li> </ul>	

### ✚ Abdominal MRI

<b>✚ Observe interpretation(C):</b>	<b>✚ Interpret under supervision(B):</b>
<ul style="list-style-type: none"> <li>• Abdominal MRI 10</li> <li>• MRCP 10</li> </ul>	<ul style="list-style-type: none"> <li>• Abdominal MRI 10</li> <li>• MRCP 10</li> </ul>
<b>✚ Independently Interpret (A)</b>	
<ul style="list-style-type: none"> <li>• Abdominal MRI 10</li> <li>• MRCP 10</li> </ul>	



## Intensive care patient management (II-3)

Credit Points	Hours for student Workload/Semester					
	Lecture	Practical	Homework	Test Preparation	Other Private study (Seminar)	Total Hours
<b>5 CP</b>	<b>15 H (5 Lect)</b>	<b>60 H (10 days)</b>	-	<b>60 H</b>	<b>15 H</b>	<b>150 H</b>
<b>Percentage%</b>	<b>10%</b>	<b>40%</b>	-	<b>40%</b>	<b>10%</b>	<b>100%</b>

Name of the course	Credit points	Responsible department	Attendance	Percentage of Achieved points
Intensive care patient management	0.5	Anesthesia and intensive care in conjunction with Diploma coordinators.	15 (5 Lecture) - Intensive care management of comatosed patients - Mechanical ventilation - Renal replacement therapy - Management of electrolyte imbalance - Intensive Care Management of Patients with Acute-on-Chronic Liver Failure (ACLF). - Intensive Care Management of Patients with Acute liver failure - Arteial Blood Gases - Sepsis - ARDS	10%
	0.5		15 hours Seminar	10%
	2		60 hours (10 days) Clinical	40%
Student signature			Principle coordinator signature	Program Academic Director signature



### Clinical case log

Date	Diagnosis of case	Level of participation *	Location	Signature of supervisor

\* Level of participation  
A- Plan and carry out  
B- Carry out  
C- Carry out under supervision

### Clinical case log

Date	Diagnosis of case	Level of participation *	Location	Signature of supervisor

\* Level of participation  
 A- Plan and carry out  
 B- Carry out  
 C- Carry out under supervision

**Clinical case log**

Date	Diagnosis of case	Level of participation *	Location	Signature of supervisor

\* Level of participation  
A- Plan and carry out  
B- Carry out  
C- Carry out under supervision

## Procedures log book

• Blood gases sampling and Interpretation.	10
• Hemodynamic monitoring	10
• Airway management	As logged
• CVP measurement	10
• Ventilator adjustment	As logged
• Syringe pump adjustment	10
• Intubation	As logged

### Test for the competency in the procedure\*

Date	Procedure	Level of competency*	Signature of supervisor

**Level of competency \***

- A- Independent performance
- B- Performance under supervision
- C- Observed





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### Test for the competency in the procedure\*

Date	Procedure	Level of competency*	Signature of supervisor

**Level of competency \***

- A- Independent performance
- B- Performance under supervision
- C- Observed

## Clinical Seminars

### Requirements:

- Attendance of at least 60% of Seminars
- Presentation of at least one case in the seminar

### Attendance

Date	Attendance	Topic	Signature



**Case or Topic presentation in the conference**

Date	Case/ Topic	Signature

## Basic Endoscopy (II-4)

Credit Points	Hours for student Workload/Semester					
	Lecture	Practical	Homework	Test Preparation	Other Private study	Total Hours
10 CP	15 H (5 Lect)	180 H (30 days)	-	75 H	30 H	300 H
Percentage%	5%	60%	-	25%	10%	100%

Name of the course	Credit points	Responsible department	Attendance	Percentage of Achieved points	
Basic Endoscopy	0.5	Internal Medicine Department (Gastroenterology unit) in conjunction with Tropical Medicine and Gastroenterology Department in conjunction with Diploma coordinators.	<ul style="list-style-type: none"> <li>- 15 (5 Lecture)</li> <li>- <b>Upper endoscopy</b></li> <li>I- Preparation for safe and effective endoscopy</li> <li>II- Sedation related to endoscopic procedure</li> <li>III- Indications for diagnostic upper GIT Endoscopy</li> <li>IV-Relative Contraindications.</li> <li>V-Details related to upper GIT Endoscopy:               <ul style="list-style-type: none"> <li>- Endoscopic request</li> <li>- Equipment</li> <li>- Patient Preparation and monitoring</li> <li>-Procedure</li> <li>- Mucosal biopsy and tissue sampling</li> <li>- Endoscopic reporting</li> </ul> </li> <li>VI-Complications of upper GIT Endoscopy and their management.</li> <li>VII. Recognition of Different lesions.</li> </ul>	5%	
	1		<b>Lower Endoscopy</b> -Indications for diagnostic lower GIT Endoscopy 2- Contraindications (absolute and relative) 3-Details related to lower GIT Endoscopy Endoscopic request Equipment Preparation of the colon Procedure (insertion, landmarks, withdrawal) Colonoscopic biopsy Handling tissue specimens Endoscopic reporting 4-Complications of lower GIT Endoscopy and their management 5- Recognition of Different lesions	30 hours Workshop	10%
	6		60 hours (10 days) Clinical	60%	
	Student signature			Principle coordinator signature	Program Academic Director signature

**(Lectures)**

Date	Attendance	Topic	Signature

## Procedures log book for Diagnostic GIT endoscopy

### Requirements:\*

✚ Level of competency (C and B)	✚ Level of competency A
<ul style="list-style-type: none"> <li>• Diagnostic Upper GIT Endoscopy (50 cases C and 20 cases B)</li> <li>• Diagnostic Lower GIT Endoscopy (20 cases C and 20 cases B)</li> <li>• Endoscopic biopsy 10 cases</li> </ul>	<ul style="list-style-type: none"> <li>• Diagnostic Upper GIT Endoscopy (10 cases)                             <ul style="list-style-type: none"> <li>▪ Diagnostic Lower GI Endoscopy (10 cases)</li> <li>▪ Endoscopic biopsy 10 cases</li> </ul> </li> </ul>
<b>Level of competency *</b>	
A- Independent performance B- Performance under supervision C- Observed	

### Test for the competency in the procedure\*

No.	Diagnosis of the case	Procedure	Level of competency*	Signature of supervisor

**Level of competency \***

- A- Independent performance
- B- Performance under supervision
- C- Observed



### Test for the competency in the procedure \*

No.	Diagnosis of the case	Procedure	Level of competency*	Signature of supervisor

**Level of competency \***

- A- Independent performance
- B- Performance under supervision
- C- Observed

## Test for the competency in the procedure\*

No.	Diagnosis of the case	Procedure	Level of competency*	Signature of supervisor

### Level of competency \*

- A- Independent performance
- B- Performance under supervision
- C- Observed

# Third Semester Modules

## Advanced Speciality Track

- 1-Advanced Hepatology
- 2-Pancreatico-biliary diseases.
- 3-Liver transplant Medicine

## Advanced Hepatology Module (III-1)

Credit Points	Student Workload/Semester (15 weeks)					
	Lecture	Practical/ Clinical	Homework	Test Preparation	Other Private study (Seminar or conference or journal club)	Total Hours
<b>15 CPS</b>	<b>60 H (20 lectures)</b>	<b>120 H (20 days)</b>	-	<b>180 H</b>	<b>90 H</b>	<b>450 H</b>
<b>Percentage%</b>	<b>13.3%</b>	<b>26.7%</b>	-	<b>40%</b>	<b>20%</b>	<b>100%</b>

Name of the course	Credit points	Responsible department	Attendance	Percentage of Achieved points
Advance Hepatology	2	Tropical Medicine and Gastroenterology Department in conjunction with Gastroenterology Unit, Internal Medicine Department.	60 H (20 lectures) - Acute on chronic liver Failure - Hepatopulmonary syndrome. - Portopulmonary hypertension (PPHT) - Management of ectopic varices. - NAFLD (Fatty liver and NASH) - Cirrhotic Cardiomyopathy - Assessment of fibrosis - Other hepatic tumors: - Wilson disease. - Alpha 1 antitrypsin deficiency. - Hemochromatosis. - Sarcoidosis. - Amyloidosis - Glycogen storage disease. Liver disease in pregnant women. - IBD and cholestatic diseases. - Caroli syndrome - Vascular diseases of the liver. - Liver in systemic diseases - Infective liver diseases -Liver biopsy. -Assessment of surgical risk in liver cirrhosis - Anesthesia and Peri-operative assessment of hepatic patient. - Intensive Care Management of Patients with Acute-on-Chronic Liver Failure (ACLF). - Intensive care and prognosis scoring systems. - Blood diseases and the liver. - Liver and Kidney. - Cardiac diseases and the liver/shock liver. -Sarcopenia in Liver Cirrhosis and Hepatic osteodystrophy.	13.3%
	3		90 hours Seminar or Conference or journal club	20%
	4		120 H (20 days) Clinical	26.7%
Student signature			Principle coordinator signature	Program Academic Director signature



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(Lectures)

Date	Attendance	Topic	Signature

## Case log

Case	Number
Acute on chronic liver Failure	5 cases
Hepatopulmonary syndrome and PPHT	As logged
NAFLD (Fatty liver and NASH)	10 cases
Metabolic liver disease	As logged
Cholestatic liver disease	10 cases
Vascular diseases of the liver.	5 cases
Infective liver disease	5 cases
Other Liver tumor	5 cases

### Clinical case log

Date	Diagnosis of case	Level of participation *	Location	Signature of supervisor

\* Level of participation

A- Plan and carry out

B- Carry out

C- Carry out under supervision



### Clinical case log

Date	Diagnosis of case	Level of participation *	Location	Signature of supervisor

\* Level of participation  
 A- Plan and carry out  
 B- Carry out  
 C- Carry out under supervision

**Clinical case log**

Date	Diagnosis of case	Level of participation *	Location	Signature of supervisor

\* Level of participation

A- Plan and carry out





B- Carry out

C- Carry out under supervision

### Out Patient Clinic

Date / Duration from -to	Name of Clinic	Signature of supervisor

**Procedure log of:**

 <b>Observe:</b>	 <b>Log of under supervision:</b>
<ul style="list-style-type: none"> <li>- 5 Abdominal US</li> <li>- 5 Liver Biopsy.</li> <li>- 5 Liver abscess aspiration under US guidance.</li> <li>- 5 Alcohol injection.</li> </ul>	<ul style="list-style-type: none"> <li>- 5 Abdominal US.</li> <li>- 5 Liver Biopsy.</li> <li>- 5 Liver abscess aspiration under US guidance.</li> <li>- 5 Alcohol injection.</li> </ul>
 <b>Independently Perform:</b>	 <b>Order and interpret:</b>
<ul style="list-style-type: none"> <li>- 5 Abdominal US</li> <li>- 5 Liver Biopsy.</li> </ul>	<ul style="list-style-type: none"> <li>- 10 Abdominal Ultrasonography and Doppler.</li> <li>- 10 CT abdomen.</li> <li>- 10 Dynamic MRI with diffusion.</li> <li>- 20 Liver function testing.</li> <li>- 10 Upper and lower endoscopy.</li> </ul>

### Test for the competency in the procedure \*

No.	Diagnosis of the case	Procedure	Level of competency*	Signature of supervisor

#### Level of competency \*

A- Independent performance/ Order and interpret

B- Performance under supervision

C- Observed

**Test for the competency in the procedure\***

No.	Diagnosis of the case	Procedure	Level of competency*	Signature of supervisor

**Level of competency \***

A- Independent performance/ Order and interpret

B- Performance under supervision

C- Observed

## Clinical Seminars or Journal Club

### Requirements:

- Attendance of at least 5 Seminars and attendance of one conference
- Presentation of at least one case in the seminar

### Attendance

Date	Attendance	Topic	Signature





## Pancreaticobiliary disease Module (III-2)

Credit Points	Hours for student Workload/Semester					Total Hours
	Lecture	Practical/ Clinical	Homework/ Assignment	Test Preparation	Other Private study (Seminar or conference)	
8 CP	1CP 30 hours	3CPS 90 hours	0.5 CP 15 H	2 CPs 60 H	1.5 CP 45 H	240
Percentage%	12.5%	37.5%	6.25%	25%	18.75%	100%

Name of the course	Credit points	Responsible department	Attendance	Percentage of Achieved points
Pancreaticobiliary disease	1	-Tropical Medicine and Gastroenterology, and Internal Medicine in conjunction with Diploma coordinators.	30 hours - Cholecystitis (Acute & chronic) - Pancreatitis (Acute & chronic) - Gallstone disease and Choledocholithiasis - Portal biliopathy - Motility disorders and Postcholecystectomy syndrome - Biliary tract cysts (Choledochal cysts) - Benign biliary strictures - Benign biliary tumors - Malignant biliary tumors (Gallbladder cancer, Cholangiocarcinoma) - Cystic lesions of the pancreas (non-mucinous) -Mucinous tumors of the pancreas - Pancreas adenocarcinoma and ampullary cancer -Neuroendocrine tumors of pancreas -Imaging (Diagnostic and Interventional) - Diagnosis and management of pancreatic insufficiency - Nutritional management in pancreatobiliary diseases - Perioperative patient care in pancreatobiliary surgery: from preoperative assessment to ERAS (Enhanced Recovery After Surgery) -Guidelines in management of Pancreatic insufficiency (or chronic pancreatitis) -Updates	12.5%
	1.5		45 hours Seminar or Conference	18.75%
	3		90 hours (Clinical)	37.5%
	Student signature			Principle coordinator signature





## Case log

Case	Number
Acute and chronic pancreatitis	10 cases
Cholecystitis (Acute & chronic)	10 cases
Gallstone disease and Choledocholithiasis	10 cases
Benign and malignant biliary tumor	10 cases
Pancreatic cysts	As logged
Pancreatic tumor	10 cases

### Clinical case log

Date	Diagnosis of case	Level of participation *	Location	Signature of supervisor

\* Level of participation  
 A- Plan and carry out  
 B- Carry out  
 C- Carry out under supervision

### Clinical case log

Date	Diagnosis of case	Level of participation *	Location	Signature of supervisor

\* Level of participation  
 A- Plan and carry out  
 B- Carry out  
 C- Carry out under supervision

### Clinical case log

Date	Diagnosis of case	Level of participation *	Location	Signature of supervisor

\* Level of participation

A- Plan and carry out


B- Carry out

C- Carry out under supervision





**Procedure log of:**

 <b>Order and interpret:</b>	
- Abdominal Ultrasonography	10
- CT abdomen	10
- MRCP	10
- ERCP	10

### Test for the competency in the procedure \*

No.	Diagnosis of the case	Procedure	Level of competency*	Signature of supervisor

**Level of competency \***

- A- Independent performance
- B- Performance under supervision
- C- Observed

### Test for the competency in the procedure\*

No.	Diagnosis of the case	Procedure	Level of competency*	Signature of supervisor

**Level of competency \***

- A- Independent performance
- B- Performance under supervision
- C- Observed

## Clinical Seminars or Journal Club

### Requirements:

- Attendance of at least 5 Seminars and attendance of one conference
- Presentation of at least one case in the seminar

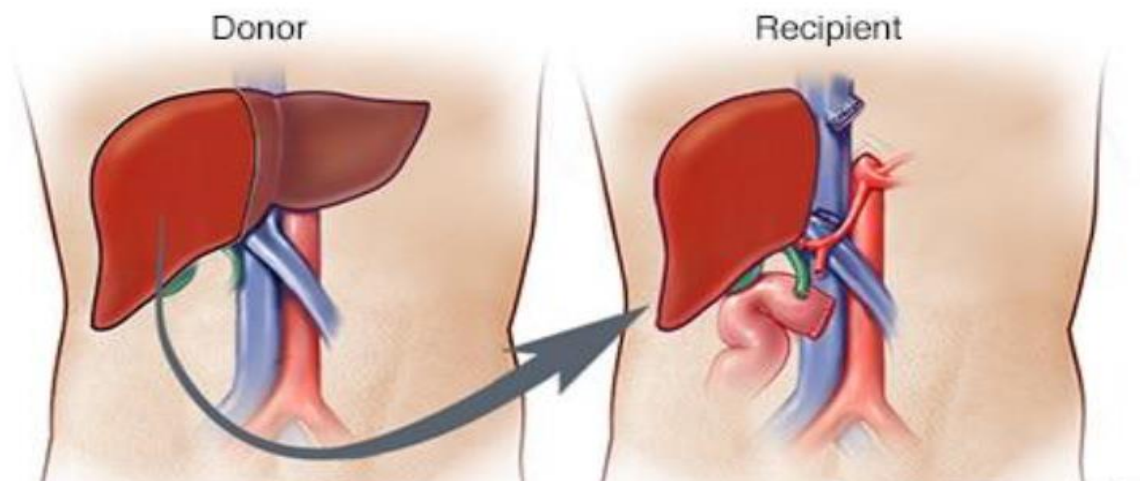
### Attendance

Date	Attendance	Topic	Signature



## Liver transplant Medicine module (III-3)

Credit Points	Student Workload/Semester (15 weeks)					Total Hours
	Lecture	Practical/ Clinical	Homework	Test Preparation	Other Private study (Attendance of workshops or Conference related to liver transplantation, Seminar attendance and/or presentation, Hospital work )	
<b>7 CP</b>	<b>1 CP 30 H</b>	<b>3 CPS 90 H</b>	-	<b>2 CPS 60H</b>	<b>1 CP 30H</b>	<b>210 H</b>
<b>Percentage%</b>	<b>14.3%</b>	<b>42.85%</b>	-	<b>28.55%</b>	<b>14.3%</b>	<b>100%</b>



Name of the course	Credit points	Responsible department	Attendance	Percentage of Achieved points
Liver transplant medicine	1	Tropical Medicine and Gastroenterology Department in conjunction with Gastroenterology Unit, Internal Medicine Department.	30 H	14.3%
	1		<ul style="list-style-type: none"> <li>- Monitoring the patient awaiting liver transplantation.</li> <li>- Management of portal hypertension.</li> <li>- Management of renal disease in the liver transplant candidate.</li> <li>- Management of hepatopulmonary syndrome and portopulmonary hypertension.</li> <li>- Fulminant hepatic failure and liver transplantation.</li> <li>- Viral hepatitis and transplantation (HCV &amp; HBV management pre transplantation)</li> <li>- Cholestatic and autoimmune liver disease and transplantation.</li> <li>- Hepatocellular carcinoma and transplantation.</li> <li>- Cholangiocarcinoma and transplantation.</li> <li>- Metabolic liver diseases and transplantation.</li> <li>- Living-donor liver transplantation.</li> <li>- Critical care of the liver transplant recipient.</li> <li>- Transmission of malignancies and infection through donor organs.</li> <li>- Indications, contraindications and pre-operative assessment and timing for transplantation.</li> <li>- Psychiatric and substance abuse evaluation of the potential liver transplant recipient.</li> <li>- Organ allocation in liver transplantation: ethics, organ supply, and evidence-based practice.</li> <li>- Rare indications of liver transplantation.</li> <li>- Vaccination in liver transplant candidate.</li> <li>- Nutrition in liver transplant candidate.</li> <li>- Work Up for donor and Recipient</li> <li>- Hazards of anesthesia and risk of surgery in hepatic patient.</li> <li>- Hospital acquired infections.</li> </ul>	14.3%
	3		90 hours (Clinical)	42.85%
Student signature			Principle coordinator signature	Program Academic Director signature







## Case log

Case	Number
Living donor Evaluation	5 cases
Pre-operative assessment and timing for transplantation.	5 cases
Recipients evaluation	5 cases
Management of HBV related LC on the waiting list	5 cases
Management of HCV related LC on the waiting list	5 cases
Management of HCC on the waiting list	5 cases

### Clinical case log


Date	Diagnosis of case	Level of participation *	Location	Signature of supervisor

\* Level of participation  
A- Plan and carry out  
B- Carry out  
C- Carry out under supervision

Date	Diagnosis of case	Level of participation *	Location	Signature of supervisor

\* Level of participation  
 A- Plan and carry out  
 B- Carry out  
 C- Carry out under supervision

**Procedure log of:**

 <b>Order and interpret (A)</b>	<b>Number</b>
<ul style="list-style-type: none"> <li>- Laboratory investigation for donor and recipient. 5</li> <li>- Imaging for donors (CT Abdomen and volumetry, MRCP) 5</li> <li>- Imaging for recipients (Chest X ray + CT abdomen, Dynamic MRI with diffusion for recipients in HCC) 5</li> <li>-Abdominal Ultrasonography and Doppler for donor and recipient. 5</li> <li>- Carotid Doppler for recipient. 5</li> <li>-Upper and lower endoscopy. 5</li> <li>- Metastatic work up for HCC patient (Bone scan, PET Scan, Whole body MRI, CT chest, CT brain). 5</li> <li>- Breast US and Mammography for female more than 45 years. 5</li> <li>-Consultation for donor and recipient. 5</li> <li>- Liver biopsy for donor. 5</li> </ul>	
<b>Observe (C) or Perform under supervision (B)</b>	
<ul style="list-style-type: none"> <li>- Abdominal US. 10 C and 10 B</li> <li>- Liver Biopsy for donor. 5 C</li> </ul>	

### Test for the competency in the procedure \*

No.	Diagnosis of the case	Procedure	Level of competency*	Signature of supervisor

- Level of competency \***
- A- Independent performance
  - B- Performance under supervision
  - C- Observed

**Test for the competency in the procedure\***

<b>No.</b>	<b>Diagnosis of the case</b>	<b>Procedure</b>	<b>Level of competency*</b>	<b>Signature of supervisor</b>

**Level of competency \***

- A- Independent performance
- B- Performance under supervision
- C- Observed



## Clinical Seminars/ conferences or Journal Club

### Requirements:

- Attendance of at least 3 Seminars and attendance of one conference
- Presentation of at least one case in the seminar

### Attendance

Date	Attendance	Topic	Signature

**Case or Topic presentation**

Date	Case/ Topic	Signature

# Fourth Semester Modules

## Advanced intervention and Applied Track

- 1- Advanced Endoscopy.
- 2- Advanced Liver Intervention.
- 3- Post-transplant medical care.

## Advanced Endoscopy (IV-1)


Credit Points	Hours for student Workload/Semester					
	Lecture	Practical	Homework	Test Preparation	Other Private study (Workshop)	Total Hours
10	15 (5 Lect)	180 (30 days)	-	75 H	30 H	300 H
Percentage%	5%	60%	-	25%	10%	100%

Name of the course	Credit points	Responsible department	Attendance	Percentage of Achieved points
Advanced Endoscopy	0.5	Endoscopy Unit in conjunction with Diploma coordinators.	<ul style="list-style-type: none"> <li>- 15 (5 Lecture)</li> <li>• Sedation related to endoscopic procedure</li> <li>• Indications for therapeutic upper GIT Endoscopy</li> <li>• Endoscopic management of Upper GIT Disorders</li> <li>• Endoscopic management of Lower GIT Disorders</li> <li>• Endoscopic hemostasis</li> <li>• Endoscopic ultrasoun</li> <li>• ERCP</li> </ul>	5%
	1		30 hours Workshop	10%
	6		180 hours (30 days) Practical	60%
	Student signature			Principle coordinator signature





**Procedure log of:**

 <b>Observe: C</b>	<b>Number</b>
<ul style="list-style-type: none"> <li>• Injection Therapy for fundal varices</li> </ul>	10
<ul style="list-style-type: none"> <li>• Band ligation for Esophageal varices</li> </ul>	10
<ul style="list-style-type: none"> <li>• Adrenaline injection or clips for bleeding peptic ulcer.</li> </ul>	5
<ul style="list-style-type: none"> <li>• ERCP</li> </ul>	10
<ul style="list-style-type: none"> <li>• EUS</li> </ul>	10
<b>Perform under supervision: B</b>	<b>Number</b>
<ul style="list-style-type: none"> <li>• Injection Therapy for fundal varices</li> </ul>	10
<ul style="list-style-type: none"> <li>• Band ligation for Esophageal varices</li> </ul>	10
<ul style="list-style-type: none"> <li>• Adrenaline injection for bleeding peptic ulcer.</li> </ul>	5
<ul style="list-style-type: none"> <li>• ERCP</li> </ul>	10
<ul style="list-style-type: none"> <li>• EUS</li> </ul>	5
<b>Independently Perform: A</b>	<b>Number</b>
<ul style="list-style-type: none"> <li>• Injection Therapy for fundal varices</li> </ul>	10
<ul style="list-style-type: none"> <li>• Band ligation for Esophageal varices</li> </ul>	10
<ul style="list-style-type: none"> <li>• Adrenaline injection for bleeding peptic ulcer.</li> </ul>	5
<ul style="list-style-type: none"> <li>• ERCP</li> </ul>	10
<ul style="list-style-type: none"> <li>• EUS</li> </ul>	5



**Test for the competency in the procedure \***

No.	Diagnosis of the case	Procedure	Level of competency*	Signature of supervisor

**Level of competency \***

- A- Independent performance
- B- Performance under supervision
- C- Observed

### **Test for the competency in the procedure\***

<b>No.</b>	<b>Diagnosis of the case</b>	<b>Procedure</b>	<b>Level of competency*</b>	<b>Signature of supervisor</b>

**Level of competency \***

- A- Independent performance
- B- Performance under supervision
- C- Observed

## Conference or Workshop

### Requirements:

- Attendance of at least one conference or workshop

### Attendance

Date	Attendance	Topic	Signature

## Advanced liver intervention module (IV-2)


Credit Points	Student Workload/Semester (15 weeks)					
	Lecture	Practical/ Clinical	Homework	Test Preparation	Other Private study	Total Hours
10 CPs	15 H (5 Lect)	180 H (30 days)	-	75 H	30 H	300 H
Percentage %	5%	60%	-	25%	10%	100%

Name of the course	Credit points	Responsible department	Attendance	Percentage of Achieved points
Advanced liver intervention	0.5	- Radiology and Tropical Medicine and Gastroenterology Department in conjunction with Gastroenterology Unit, Internal Medicine Department.	15 (5 Lecture) - Multidisciplinary Team and Barcelona system for HCC staging and management. - Guidelines for HCC management. -Liver Abscess. - Alcohol Injection. Radiofrequency ablation (RFA). - Trans arterial chemoembolization (TACE). Transarterial - Radioembolization (TARE) - Microwave Ablation. - Liver Biopsy.	5%
	1		30 hours Seminar or workshop	10%
	6		180 (30 days) Practical	60%
Student signature			Principle coordinator Signature	Program Academic Director signature





**Procedure log of:**

 <b>Observe: C</b>	<b>Number</b>
Abdominal US and Doppler US.	10
- Alchol Injection.	5
-Liver biopsy.	5
- Aspiration of Liver Abscess.	5
-Pig tail insertion Under Supervision.	5
-Radiofrequency ablation (RFA) under supervision.	5
-Microwave Ablation under supervision.	5
<b>• Perform under supervision: B</b>	<b>Number</b>
Abdominal US and Doppler US.	10
- Alchol Injection.	5
-Liver biopsy.	5
- Aspiration of Liver Abscess.	5
-Pig tail insertion Under Supervision.	5
-Radiofrequency ablation (RFA) under supervision.	5
-Microwave Ablation under supervision.	5
<b>• Independently Perform: A</b>	<b>Number</b>
Abdominal US and Doppler US.	10
- Alchol Injection.	5
-Liver biopsy.	5
- Aspiration of Liver Abscess.	5
-Pig tail insertion Under Supervision.	5
-Radiofrequency ablation (RFA) under supervision.	5
-Microwave Ablation under supervision.	5



### Test for the competency in the procedure \*

No.	Diagnosis of the case	Procedure	Level of competency*	Signature of supervisor

**Level of competency \***

- A- Independent performance
- B- Performance under supervision
- C- Observed

### Test for the competency in the procedure\*

No.	Diagnosis of the case	Procedure	Level of competency*	Signature of supervisor

**Level of competency \***

- A- Independent performance
- B- Performance under supervision
- C- Observed

## Conference or Workshop

### Requirements:

- Attendance of at least one conference or workshop

### Attendance

Date	Attendance	Topic	Signature

## Post-transplant medical care module (IV-3)

Credit Points	Student Workload/Semester (15 weeks)					
	Lecture	Practical/ Clinical	Homework	Test Preparation	Other Private study (Conference or 2 active seminar+ 2 passive seminar)	Total Hours
<b>10 CPs</b>	<b>30 H (10 Lect)</b>	<b>150 H (25 days)</b>	-	<b>100 H</b>	<b>30 H</b>	<b>300 H</b>
<b>Percentage %</b>	<b>10%</b>	<b>50%</b>	-	<b>30 %</b>	<b>10%</b>	<b>100%</b>

Name of the course	Credit points	Responsible department	Attendance	Percentage of Achieved points
Post-transplant medical car	1	- Internal medicine in conjunction with Tropical Medicine and Gastroenterology.	30 (10 Lecture)	10%
	1		- Medical Problems after Liver Transplantation	
	5		- Recurrence of the Original Liver Disease	
			- Infections in the Transplant Recipient	
			- Renal Function Post-transplant	
			- Cutaneous Diseases in the Transplant Recipient	
			- Productivity and Social Rehabilitation of the Transplant Recipient	
			- Immunosuppressive Medications	
			- Drug Interactions with Commonly Used Immunosuppressive Agents	
			- Special Considerations for Liver Transplantation in Children	
			- HCV management post transplantation	
			- HBV management post transplantation	
			- Long term follows up after transplant	
			- Vaccination post liver transplantation	
			- Complications (acute and chronic rejection and infections) post liver transplantation	
			- Biliary complications and its management	
			- Vascular complications and its management	
			- Small for size syndrome and its management	
			- Post-transplant lymphoproliferative disorder and other malignancies after liver transplantation	
			30 hours Seminar or workshop	10%
			150 hours (25 days)	50%
Student signature			Principle coordinator Signature	Program Academic Director signature





## Case log

Cases	Number
- HCV management post transplantation	10 cases
- HBV management post transplantation	5 cases
- Metabolic syndrome post-transplant.	As logged
- Acute and chronic rejection	As logged
- Infections post liver transplantation	As logged
- Biliary complications post liver transplantation	As logged
- Vascular complications post liver transplantation	As logged
- Small for size syndrome	As logged



### Clinical case log

Date	Diagnosis of case	Level of participation *	Location	Signature of supervisor

\* Level of participation  
 A- Plan and carry out  
 B- Carry out  
 C- Carry out under supervision

### Clinical case log


Date	Diagnosis of case	Level of participation *	Location	Signature of supervisor

\* Level of participation  
A- Plan and carry out  
B- Carry out  
C- Carry out under supervision

### Out Patient Clinic

Date / Duration from -to	Name of Clinic	Signature of supervisor

**Procedure log of:**

 <b>Order and interpret (A)</b>	<b>Number</b>
<ul style="list-style-type: none"> <li>-Abdominal Ultrasonography and Doppler for the recipient</li> <li>- Cholangiogram 3-month post liver transplant through biliary stent.</li> <li>- MRCP in suspected biliary stricture.</li> <li>- Liver biopsy for suspected chronic rejection.</li> <li>- Virological markers and PCR for Recurrent HBV, HCV or suspected CMV.</li> </ul>	<p>5</p> <p>5</p> <p>5</p> <p>5</p> <p>As logged</p>
<b>Observe (C) or Perform under supervision (B)</b>	
<ul style="list-style-type: none"> <li>- Abdominal US and doppler</li> <li>- Liver Biopsy search for rejection.</li> </ul>	<p>10 C and 10 B</p> <p>As logged</p>

**Test for the competency in the procedure \***

No.	Diagnosis of the case	Procedure	Level of competency*	Signature of supervisor

**Level of competency \***

- A- Independent performance
- B- Performance under supervision
- C- Observed

### Test for the competency in the procedure\*

No.	Diagnosis of the case	Procedure	Level of competency*	Signature of supervisor

**Level of competency \***

- A- Independent performance
- B- Performance under supervision
- C- Observed

## Seminar, Conference or Workshop

Requirements:

(Conference or 2 active seminar+ 2 passive seminar)

### Attendance

Date	Attendance	Topic	Signature

# Declaration

Course Structure Mirror	Responsible (Course) Coordinator Name:	Signature	Date
<p><b><u>Semester 1: Basic Science+ Elective Module</u></b></p> <p><b>Basic Science</b></p> <ol style="list-style-type: none"> <li>1- Anatomy</li> <li>2- Physiology</li> <li>3- Microbiology and immunology</li> <li>4- Pharmacology</li> <li>5- Pathology</li> <li>6- Clinical Pathology and molecular biology (genetics)</li> <li>7- Basic nutrition</li> <li>8- Statistics and Research Methodology</li> <li>9- Evidence based Medicine</li> <li>10- Information technology</li> </ol> <p><b>Elective Modules</b></p>			
<p><b><u>Semester 2: Clinical supportive sciences</u></b></p> <ol style="list-style-type: none"> <li>1- Basic Hepatology (part 1)</li> <li>2- Imaging</li> <li>3- Intensive care patient Management</li> <li>4- Basic Endoscopy</li> </ol>			
<p><b><u>Semester 3: Speciality Track</u></b></p> <ol style="list-style-type: none"> <li>1- Advanced Hepatology (part 2)</li> <li>2- Pancreatico-biliary diseases.</li> <li>3- Liver transplant Medicine</li> </ol>			
<p><b><u>Semester 4: Advanced intervention and Applied Track</u></b></p> <ol style="list-style-type: none"> <li>1- Advanced Endoscopy.</li> <li>2- Advanced Liver Intervention.</li> <li>3- Post-transplant medical care.</li> </ol>			
<p><b>- Fulfillment of required credit points prior to final examination</b></p>			
<p><b>Diploma Principle Coordinator</b></p>			