Course Specifications of Microbiology and Immunology for Master degree in Paediatrics Hepatology

1. Program Title: Master degree in pediatrics hepatology
2. Minor/major element of the program: Minor
3. Department offering the program: Pediatrics hepatology Department
4. Department offering the course: Microbiology and Immunology Department
5. Academic year/level: First part

A- Basic Information

Title: Microbiology and Immunology for Master degree in paediatrics hepatology
Total hours:

<table>
<thead>
<tr>
<th>Total hours</th>
<th>Tutorial/clinical</th>
<th>Practical</th>
<th>Lectures</th>
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<tbody>
<tr>
<td>15 hours</td>
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B- Professional Information

1. Course aims:
The aim of this course is to provide the student with the basic microbiological and immunological knowledge and skills essential for the practice of Pediatric hepatology specialty and necessary to gain further training and practice in the field of Pediatrics hepatology.

2. Intended Learning Outcomes of Course (ILOs):

a. Knowledge and Understanding:
By the end of the course the student should be able to:
a.1 Describe the basic microbiology and immunology related to pediatric hepatobiliary diseases, by being able to:
- List the microorganisms affecting children all over the world and particularly in Egypt.
- Describe the metabolism and genetics of organisms.
- Describe the pathology, clinical symptoms and complications of each disease.
- Summarize the laboratory tests needed for diagnosis of each case.
- Name the drugs and instructions used for treatment of each case.
- Describe some infection control methods
- Describe the structure and function of immune system

**b- Intellectual Skills:**
By the end of the course the student should be able to:
b.1 Interpret data acquired through microbiological tests to reach a provisional diagnosis for pediatric hepatobiliary problems.
b.2 Select from different diagnostic microbiological tests the ones that help reaching a final diagnosis for pediatric hepatobiliary problems.
b.3 link between knowledge for professional problem solving.

b.4 Identify pediatric hepatobiliary problems and find solutions based on proper understanding of pathological basis.
b.5 identify different pediatric hepatobiliary problems and find solutions for them based on proper understanding of microbiological and immunological basis.

**c- Professional and Practical Skills:**
By the end of the course the student should have the ability to:
c.1 understand and evaluate medical microbiological reports.
c.2 assess methods and tools existing in the area of pediatrics based on proper understanding of microbiological and immunological basis.

**d- General and Transferable Skills:**
By the end of the course the student should have the ability to:
d1. Communicate effectively by different types of effective communication.
d2. Use appropriate computer program packages and the internet to serve the development of professional practice.
d3. Assess himself and identify his personal learning needs.
d4. Use of different sources for information and knowledge.
d5. Work coherently and successfully as a part of a team and team’s leadership.
d6. Manage time effectively.
d7. Maintain Continuous self-learning

**Program coordinator:** Prof. Dr. Enas Ghonem
**Dean:** Prof. Dr. Magdy Khalil

**Head of Quality Assurance Unit:** Dr. Wessam Saber Morad