



## COURSE SPECIFICATION

**2<sup>nd</sup> part MSc Pediatrics Elective course Intensive Care**

**Faculty of Medicine- Mansoura University**

### (A) Administrative information

(1) Programme offering the course.	<b>MSc Pediatrics (PED 500)</b>
(2) Department offering the programme.	<b>Pediatrics</b>
(3) Department responsible for teaching the course.	<b>Pediatrics</b>
(4) Part of the programme.	<b>2<sup>nd</sup> part MSc Pediatrics – Elective course Intensive Care</b>
(5) Date of approval by the Department's council	<b>27/4/2016</b>
(6) Date of last approval of programme specification by Faculty council	<b>9-8-2016</b>
(7) Course title.	<b>Elective course Intensive Care</b>
(8) Course code.	<b>PED 509 API</b>
(9) Total teaching hours.	<b>15 hours</b>

**(1) CourseAims:**

The broad aims of the course are as follows: to provide the candidate with

1. Essential knowledge about the pathophysiology, epidemiological, clinical presentation and management of pediatric critical illnesses.
2. Skills necessary to diagnose and manage different life threatening pediatric emergencies.

## **(2) Intended Learning Outcomes (ILOs):**

On successful completion of the course, the candidate will be able to:

### **A- Knowledge and Understanding**

- A1. Identify critically ill child.
- A2. Describe the basics of different invasive procedures in intensive care unit, indications, contraindications, precautions and complications.
- A3. Define acute respiratory distress syndrome (ARDS), how to diagnose and how to manage.
- A4. Outline the method of maintaining the patient temperature normal and recognize the techniques and mechanisms of thermoregulation.
- A5. List causes of hypertension and lines of management of hypertensive emergency.
- A6. Label sepsis and multi-organ dysfunction syndrome.
  - A6.1 Define sepsis, septic shock and multi-organ dysfunction syndrome.
  - A6.2 State the etiology and pathophysiology of sepsis.
  - A6.3 Outline of management of sepsis, septic shock and multi-organ dysfunction syndrome.
- A7. Memorize basic knowledge as regards sedation and analgesia of critically ill child.
- A8. Discuss causes of withholding and withdrawal of life support.
- A9. Define brain death and underline reversible causes of death.
- A10. Know methods and values of neurological monitoring.
- A11. Indicate advanced hemodynamic monitoring and its methods.
- A12. Discuss how to select antimicrobial therapy for critically ill children.
- A13. Record the severity of patient illness according to different scoring systems.

-A14. Discuss precautions before, during and after transportation of critically ill child.

**B- Intellectual skills**

B1. Design plan of transportation of a critically ill patient

B2. Apply basics of thermoregulation in patient recovery

B3. Formulate plan for sedation and analgesia of different ICU patients.

B4. Compare different scoring systems of patient illness.

B5. Compare the indications of different invasive procedures in ICU

B6. Develop plan for hemodynamic and neurological monitoring in ICU

### (3) Course Contents

Course	Title	Teaching hrs	
		lectures	ILOs
Advanced Pediatric ICU	Evaluation of the sick child	1	A1
	Invasive procedures	1	A2
	Invasive procedures II	1	A2- B5
	ARDS	1	A3
	Thermoregulation	1	A4
	Thermoregulation	1	A4
	Hypertensive emergencies	1	A5
	Sepsis and multiorgan failure	1	A6
	Sedation and analgesia	1	A7
	Withholding and withdrawal of life support	1	A8
	Brain death	1	A9
	Neurological monitoring	1	A10-B6
	Advanced hemodynamic monitoring	1	A11-B6
	Antimicrobial therapy in PICU	1	A12
	Severity of illness scoring systems	1	A13-B5
	Transport of the critically ill child	1	A14-B1
Total		15	

### (4)Teaching methods:

4.1: lectures and scientific seminar

4.2: Self learning

### (5) Assessment methods:

5.1.... Written for assessment of..... (knowledge, intellectual skills )

5.2.... Oral ..... for assessment of.....(knowledge, intellectual skills)

5.3 MCQ exam for assessment of..... (knowledge, intellectual skills )

#### Assessment schedule : Semester & Final Exam.

Course	Marks		
Advanced Pediatric ICU	MCQ (Semester Exam)	Essay (Final Exam)	Oral
	10	40	25
Total	75		

### 6)References of the course:

6.1: Lectures Hand out notes.....

6.2: Text books:...Nelson Textbook of Pediatrics

6.3: Journals:...Pediatric Clinics of North America.....

6.4: Websites:...www.google.com www.pubmed.com.....

6.5.Rogers' handbook of Pediatric Intensive Care.

### **(7) Facilities and resources mandatory for course completion.**

- **LECTURE HALLS:**

Two halls for lecturers are available at Mansoura University Children's Hospital (MUCH). The hall is equipped with white board, data show, and computer.

- **CLINICAL ROUNDS HALLS:**

Six halls for clinical rounds are available at Mansoura University Children Hospital (MUCH). Computer and AV aids facilities are available with prior arrangement.

- **LIBRARY:**

The library is located on the 4<sup>th</sup> floor of the Faculty of Medicine, Mansoura University.

- **FACILITIES FOR TUTORS**

In addition to the library on 4th floor of the Faculty of Medicine, Mansoura University, there is a specialized pediatric library at MUCH (Professor Mohammad Hafez's Library).

The offices of all staff at MUCH are equipped with computers and high speed internet connection.

International databases are available through the website of the university ([www.mans.edu.eg](http://www.mans.edu.eg))

**Course coordinator: Dr. Hanan Halby**

**Head of the department: Prof. Ali Shaltout**

**Date:**