



# Course SPECIFICATION Faculty of Medicine- Mansoura University

# (A) Administrative information

(1) Programme offering the course.	Pediatric Surgery
(2) Department offering the programme.	Pediatric Surgery Pediatrics
(3) Department responsible for teaching the course.	Pediatric Surgery Pediatrics
(4) Part of the programme.	Second Part
(5) Date of approval by the Department's council	9/8/2016
(6) Course title:	Neonatal intensive care
(7) Course code:	PEDSUR 620 NICU
(8) Total teaching hours.	60

# Professional information

#### (1) Program Aims.

The broad aims of the Program are as follows:

- **1-To** provide competencies, knowledge and clinical skills needed to preserve life of critically ill child.
- **2- To** make the candidates participate as team members in the care of patients with acute life threatening events.
- **3- To** make the candidate function with other members of the health care team to provide optimum care at the optimum time to seriously ill child.
- 4- **To** demonstrate the ability for self learning and evaluate the clinical practice and educational needs.
- 5- **To** provide knowledge about ICU equipments, invasive procedures, monitoring and transport of critically ill child.

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

On successful completion of the program the candidate will be able to:

#### A- Knowledge and Understanding

- -A1.Identify critically ill child.
- -A2. Know techniques 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. Select 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 Know the etiology and pathophysiology of sepsis.
  - A6.3 Discuss lines of management of sepsis, septic shock and multiorgan 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. Know 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. Assemble basic medical science with clinical care.
- B2. Appraise reasonably and evidence based in solving clinical problems; Prioritize clinical problems, evaluate information objectively, recognizing its limitations.
- B3. Determine and critically solve medical problems.
- B4. Analyze the results of history, physical and laboratory test findings to reach a meaningful diagnostic formulation.
- B5. Construct appropriate management strategies for patients with common acute medical diseases.
- B6. Plan a course of management for stabilization of patients.
- B7. Assemble factors that place individuals at risk for complications, to determine strategies for appropriate response.
- B8. Evaluate relevant and current data from literature, using information technologies and library resources, in order to help solve a clinical problem based on evidence.
- B9. Differentiate symptoms, signs and disorders in order to reach a final diagnosis
- B10. Propose research and scientific methods through:
  - B10.1. Formulation of research questions.
  - B10.2. Inspection of the importance of precision in collecting, analyzing and interpreting medical data.
  - B10.3. Determine the Implement the ethics in the study design

## (3) Curriculum structure and contents.

# 4. a- Duration of the program (in months):

## 1. Duration of the Course (the minimum):

□ 1 semester (15 weeks)

#### 2. Parts of the Course:

At any semester of the second part.

# Teaching Activities.

Title	Teaching hrs	
	lectures	Total
Evaluation of the sick child	4	4
Invasive procedures	4	4
Invasive procedures II	4	4
ARDS	4	4
Thermoregulation	4	4
Thermoregulation	4	4
Hypertensive emergencies	4	4
Sepsis and multiorgan failure	4	4
Sedation and analgesia	4	4
Withholding and withdrawal of life	4	4
support	4	4
Brain death	4	4
Neurological monitoring	4	4
Advanced hemodynamic monitoring	4	4
Antimicrobial therapy in PICU	4	4
Severity of illness scoring systems	2	2
Transport of the critically ill child	2	2
Total	60	60

#### (4) Teaching methods.

- 1. Weekly lectures and scientific seminar
- 2. Clinical Practice under supervision
- 3. Clinical demonstrations, practice of skills, and discussions during grand rounds and case presentation.
- 4. Self learning

#### (5) Assessment methods:

Only written exam for assessment of knowledge and intellectual skills.

Assessment schedule:

Final exam

Percentage of each Assessment to the total mark:

Written exam: 80 marks. MCQ exam: 20 marks.

#### (6) References of the course.

Rogers' handbook of Pediatric Intensive Care.

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

#### 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)

#### **CLINICAL FACILITIES:**

- Pediatric intensive care unit in the third floor of MUCH.
- Emergency service available through the emergency department of MUCH

### (8) Evaluation of Programme's intended learning outcomes (ILOs):

Evaluator	Tools*	Signature
Internal evaluator (s)	Focus group discussion	
Prof.Dr. Mohammed El-Ghazaly	Meetings	
Prof.Dr. Kamal Abd El-Elah		
Ass Prof.Dr. Adham El-Said		
External Evaluator (s)	Reviewing according to external	
Prof. Gamal Eldin El-Tagy	evaluator checklist report.	
Prof. Sherif Shehata		
Senior student (s)	none	
Alumni	none	
Stakeholder (s)	none	
Others	none	

#### \* TOOLS= QUESTIONNAIRE, INTERVIEW, WORKSHOP, COMMUNICATION, E\_MAIL

We certify that all information required to deliver this programme is contained in the above specification and will be implemented. All course specification for this programme are in place.

place.			
Programme coordinator:	Signature & date:		
Ass Prof. Adham Ahmad Elsaid			
Lect. Hesham Mahmoud Sheir			
Head of pediatric surgery Department			
Prof. Dr. Mohamed El-Ghazaly Waly			
Dean:	Signature & date:		
Prof. Dr. El Said Abdel Hady			
Executive director of the quality assurance unit:	Signature & date:		
Prof.Dr. Seham Gad El-Hak			