Template for
Course Specifications

Faculty : Medicine
Department : Pediatrics

Course Specifications

Programme(s) on which the course is given :	MBBCH
Department offering the course :	Pediatrics
Academic year / level :	2015/ 2016 (5th year)
Date of specification approval :	27/4/2016

A- Basic information:

Title: Pediatrics Code: PED

Lecture: 108 Tutorial: 0 Practical 110 Total: 218

B- Professional Information:

1-Overall Aims of Course

1-To provide students with knowledge, attitude and skills required to deal efficiently with common pediatric problems with special emphasis on pediatric emergencies.
2-To provide the student with skills required to prevent pediatric health hazards and maintain normal pediatric health and child welfare.
3- To engage the student in post graduate active learning and research in the pediatric field

2-Intended Learning Outcomes (ILOs):

a- Knowledge and Understanding:

By the end of the course, the student will be able to;

a1- Demonstrate normal and abnormal patterns of growth and development.
a2- Identify factors and disorders affecting growth and their management
a3 Relate nutritional requirements in different age groups and how to meet these requirements.
a4- Identify the merits of breast and artificial feeding.
a5- Describe the diagnostic criteria and the management of common nutritional disorders.
a6- Identify features of full term and preterm newborn
a7- Recognize common neonatal problems and their management namely, neonatal jaundice, prematurity and low birth weight, respiratory distress and cyanosis in newborns, hypoglycemia and birth injuries.
a8- Determine the principles of neonatal resuscitation in the delivery room.
a9- Describe in full details the national immunization program for children.
a10- Determine normal and abnormal chromosomal patterns in human, modes of inheritance and common chromosomal abnormalities.
a11- Explain causes, presentation and management of nephritis, nephrotic syndrome, urinary tract infection and renal impairment in children.
a12- Recognize common pediatric CVS problems, list features and management of acute rheumatic fever and common congenital heart diseases.
a13- Identify symptoms, list investigations and management of upper and lower respiratory disorders especially croup, pneumonia and bronchial asthma.
a14- Explain causes and features of common types of anemia and bleeding tendency and their management

a15- Explain different presentations of common childhood malignancies namely acute leukemia, lymphoma and their outline of management.
a16- Indicate vaccine preventable bacterial and viral infections.
a17- Recognize the common endocrinal disorders of childhood namely; thyroid, diabetes mellitus and short stature.
a18- Recognize common pediatric neurologic problems, list causes, features and management of hydrocephalus, cerebral palsy and different types of seizures.
a19- Identify common pediatric GIT disorders and list causes, features and management of acute, chronic liver diseases and cirrhosis
a20- Explain causes, presentation and management of diarrhea and dehydration.
a21 List and recall the steps of basic and advanced life support, and identify grades and management of coma in children.
a22 Demonstrate features, causes and management of electrolyte disturbances and underline respiratory and metabolic emergencies

b- Intellectual Skills:
By the end of the course, the student will be able to;

b1- Relate symptoms to disorders of cardiovascular system in children.
b2- Evaluate the properties and advantages of breast versus artificial feeding
b3- Assess causes and patterns of protein energy malnutrition and vitamin deficiencies.
b4- Assess common neonatal problems such as jaundice, preterm, birth injuries and asphyxia.
b5- Distinguish high risk newborns .
b6- Assess patients with serious pediatric respiratory and metabolic emergencies, seizures and shock and decide management plan.
b7- Evaluate cases with hematuria or edema.
b8- Distinguish cases of rheumatic or congenital heart and determine and differentiate types of heart murmer.
b9- Categorize upper from lower respiratory diseases and assess common causes of recurrent or persistent wheeze or cough
b10- Evaluate cases of anemia, bleeding tendencies and decide clues of hematologic malignancies
b11- Assess types of exanthematous fevers
b12- Distinguish between cases of CNS infections from other imitators
b13- Design preventive measures of common infectious diseases
b14- Determine the basic management of common endocrinological problems such as diabetes, thyroid
b15 Differentiate between causes and patterns of upper and lower motor neuron lesions and causes of inability to walk
b16 Distinguish between different types of dehydration and compose management plans

c- Professional and Practical Skills:
By the end of the course, the student will be able to;

c1- Take focused history according to the child's complaint.
c2- Perform clinical examination of different systems competently and illustrate clinical sign.
c3- Determine criteria of life threatening conditions in children to initiate appropriate management.

c4- Decide the proper management of patient on a general inpatient service and which require critical care.

c5- Practice family-centered patient care that is culturally effective and developmentally age appropriate

c6- Apply the techniques of neonatal and pediatric resuscitation (Skill lab).

c7- Interpret the results of different diagnostic tools such as radiological, other laboratory investigations such as CBC, bleeding profile and blood gases and how to implement these data in the diagnosis, management and follow up of cases.

c8- Counsel properly the patients and families regarding their conditions .

c9- Employ safe prescriptions of different types of drugs based on patient's weight, age and health condition.

d- General and Transferable Skills:

By the end of the course, the student will be able to;

d1- Apply principles of the lifelong learning needs of the pediatric profession.

d2- Practice information and communication technology effectively in the field of pediatric practice.

d3- Manage, and manipulate information by all means, including electronic means during presentation of cases.

d4- Report information clearly in written, electronic and oral forms.

d5- Communicate ideas and arguments effectively through case discussion and interactive teaching.

d6- Work effectively within a team through case taking and resuscitation maneuvers

d7- Apply Evidence Based Medicine in management decisions.

d8- Apply safety and infection control measures during practice.

E- Professional attitude:

By the end of the course, the student will be able to;

E.1. Adopt an empathic and holistic approach to the patients and their problems.

E.2. Respect patients' rights and involve their caretakers in management decisions.

E.3. respect the different cultural beliefs and values in the community they serve.

E.4. Recognize the important role played by other health care professions in patients' management.

E.5. Be aware of and understand the National Code of Ethics issued by the Egyptian Medical Syndicate.

E.6. Recognize one's own limitations of knowledge and skills and refer patients to appropriate health facility at the appropriate stage.

E.7. Ensure confidentiality and privacy of patients' information.

F- Communication skills:

By the end of the course, the student will be able to;

F.1. Communicate clearly, sensitively and effectively with patients and their relatives, and colleagues from a variety of health and social care professions.

F.2. Communicate effectively with individuals regardless of their social, cultural, ethnic backgrounds, or their disabilities.

F.3. Honor and respect patients and their relatives, superiors, colleagues and any other member of the health profession.

3- Contents:

Topic	No. of hours	Lecture	Tutorial/Practical
Growth and Development	6	4	2
Nutrition and Infant Feeding	20	10	10
Perinatology and Neonatology	22	12	10
Social and Preventive Paediatrics	11	3	8
Genetics and Dysmorphology	12	6	6
Nephrology	14	8	6
Cardiovascular system	22	10	12
Respiratory System	22	10	12
Hematology/Oncology	22	10	12
Infectious and Parasitic Diseases	14	8	6
Endocrinology and Metabolism	12	6	6
Neuromuscular Disorders	12	6	6
Gastroenterology and Hepatology	13	7	6
Pediatric Emergencies	14	8	6
Skill lab	2		2
Total	216	108	110

4-Teaching & Learning Methods:

Methods Used:

4.1-Lectures

The course is taught over 75 lectures one and half hours each (total 108 hrs).

4.2-Clinical rounds: For clinical demonstrations, practice of skills, and discussions.

4.3- Self learning: through team work performance of

-Scientific research on certain points within scientific curriculum.

-Simplified collection and interpretation of data from field studies.

-Preparation and presentation of clinical cases.

-Afternoon clinical tutorial in Mansoura University Hospital wards.

4.4- Skill lab:

-Neonatal resuscitation manikins

-Pediatric resuscitation manikins.

4.5- Bed-side teaching (in very small groups) in the 6 general pediatric inpatient units.

Time Plan:

Item:	Time schedule	Teaching hours	Total hours
Lectures	Saturday to Thursday 9 - 10:30 am	75 lectures X 1.5 hour	108 hours
Clinical rounds	10.30 – 12 pm	54 sessions X 2 hours	108 hours
Skill lab	1-3 pm		2 hours
TOTAL			218 hours

5-Student Assessment Methods:

Method	To Assess
5.1 Written examination (Ultra short essay)	a1-a22, b1-b16
5.2 MCQ examination	a1-a22, b1-b16
5.3 Structured examination (practical and clinical)	a1-a22, b1-16, c1-c9, e1-e7, f1-f4
5.4 Oral examination (structural oral exam)	a1-a22, b1-b16, c1-c9, d1-8, e1–e7, f1-3
5.5 Summative assessment (presentation of clinical cases, research or field studies)	b1- b16, c1, d2, d3, d4, d5

ASSESSMENT SCHEDULE:

- **TERM EXAMINATION:** Takes place at the end of each clinical term. This is in the form of an OSCE exam including 6-8 stations (history, skills, communications, diagnostic tools, interpretations and clinical cases).

- **FINAL EXAMINATION:** at the end of the academic year for all students.

WEIGHTING OF ASSESSMENTS

Examination		**Mark**	**percent**
Term Examination			
	OSCE	90	18%
Log book activities and assay presentation		10	2%
Final examination			
Theory			
	Ultra short assay	175	50%
	MCQ	75	
Practical			
	OSCE (clinical)	120	24%
	Oral (structural)	30	6%
Total		500	100%

- The minimum passing score is 300 marks provided that at least 30% (75 marks) are obtained in the written exam including (assay and MCQ)
- Final grades are:

** EXCELLENT ≥85% ** VERY GOOD 75 - <85%
** GOOD 65- <75% **PASS 60-<65%.

Course ILOs matrix:

Topics	ILOs																											
	A																						B							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	1	2	3	4	5	6	7	8
Growth and Development	X	X																				X								
Nutrition and Infant Feeding			X	X	X																			X	X					
Perinatology and Neonatology						X	X	X																		X	X			
Social and Preventive Paediatrics									X																					
Genetics and Dysmorphology										X																				
Nephrology											X											X							X	
Cardiovascular system												X											X							X
Respiratory System													X									X						X		
Hematology/Oncology														X	X															
Infectious and Parasitic Diseases																X														
Endocrinology and Metabolism																	X					X						X		
Neuromuscular Disorders																		X			X							X		
Gastroenterology and Hepatology																			X	X		X								
Pediatric Emergencies												X	X							X	X	X						X		
Methods of teaching																														
Lectures	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X			
Clinical rounds	X				X	X		X		X	X	X	X	X	X		X	X	X		X	X	X		X		X	X	X	X
Self learning					X						X								X				X							X

Topics	ILOs																																
	B								C									D								E							F		
	9	10	11	12	13	14	15	16	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	1	2	3
Growth and Development													X			X			X	X		X	X						X		X				X
Nutrition and Infant Feeding													X			X				X		X	X						X		X				X
Perinatology and Neonatology									X	X	X		X	X					X	X		X	X	X							X		X	X	X
Social and Preventive Paediatrics					X								X			X		X		X		X	X						X		X				X
Genetics and Dysmorphology										X						X			X	X	X	X	X			X	X	X		X	X		X	X	X
Nephrology									X	X							X	X		X	X	X	X	X		X	X	X		X	X	X	X	X	X
Cardiovascular system									X	X	X	X			X		X	X	X	X	X	X	X	X		X	X	X		X	X	X	X	X	X
Respiratory System	X								X	X	X	X			X		X	X	X	X	X	X	X	X		X	X	X		X	X	X	X	X	X
Hematology/Oncology		X							X	X					X		X	X		X	X	X	X	X		X	X	X		X	X	X	X	X	X
Infectious and Parasitic Diseases			X	X					X	X		X					X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X
Endocrinology and Metabolism						X			X	X	X						X	X		X	X	X	X	X		X	X	X		X	X	X	X	X	X
Neuromuscular Disorders				X			X		X	X	X						X	X		X	X	X	X	X		X	X	X		X	X	X	X	X	X
Gastroenterology and Hepatology								X	X	X	X				X		X	X		X	X	X	X	X		X	X	X		X	X	X	X	X	X
Pediatric Emergencies							X	X	X	X	X	X		X	X		X	X			X	X	X	X		X	X	X	X	X	X		X	X	X
Methods of teaching																																			
Lectures		X	X	X	X	X		X				X	X		X		X	X		X	X			X							X		X		
Clinical rounds	X	X	X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Self learning							X	X	X			X							X	X	X	X	X			X		X		X		X			

6- List of References:

6.1 Illustrated text book of pediatrics by Tom Lissaeur
6.2 Nelson's "Essentials of Pediatrics" (available from bookshops at the faculty)
6.3 Course Notes

7- Facilities Required for Teaching and Learning:

7.1 LECTURE HALLS: 7 halls for lecturers (small group teaching) are available at Mansoura University Children Hospital (MUCH). The hall is equipped with white board, overhead projector, and computer and LCD projector.

7.2 CLINICAL ROUNDS HALLS:

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

7.3 LIBRARY:

-The library is located on the 4th floor of the Faculty of Medicine, Mansoura University.

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

-International databases are available through the website of the university (www.mans.edu.eg)

7.4 CLINICAL FACILITIES:

-Six general pediatric inpatient units at MUCH.

-Eleven specialized pediatric units including pediatric intensive care unit, infectious diseases, neonatology, gastroenterology and hepatology, genetics, allergy and immunology, endocrinology, hematology and oncology, cardiology, nephrology and neurology.

-General and specialized outpatient clinics serving around 600 patients daily. The clinics work for 6 days a week.

- Inpatient Ward.

-Emergency service available through the emergency department of MUCH.

7.5 SKILLS LAB:

-Neonatal resuscitation manikins

-Paediatric resuscitation manikins.

Course Coordinator:
Professor / **Mohammed Ezz** **Signature……**

Head of the department:
Professor **/ Mohamed Magdy Abouelkheir** **Signature……**