



كيفية إعداد توصيف المقررات الدراسية للدراسات العليا

توصيف المقررات الدراسية يتضمن توضيح أقل المتطلبات الواجب توافرها في طالب الدراسات العليا للحصول على درجة الماجستير والدكتوراه. يشمل توصيف المقرر الدراسي الآتي:

- الأهداف التعليمية للدرجة العلمية
- المعرفة والمهارات التي يجب أن يحصل عليها الطالب في نهاية فترة الدراسة والتدريب
- طرق التدريس (مثال: محاضرات ، ورش عمل ، تدريب معلمي)
- محتويات المنهج العلمي (الموضوعات العلمية ومراجعتها، عدد ساعات تدريس الجزء النظري والعملية والإكلينيكي)
- طرق تقييم الطالب (مثال: الامتحانات بكافة صورها، الحضور، المقال العلمي ، log book)
- نظام الامتحانات وكيفية توزيع الدرجات
- طرق التقييم للمقرر الدراسي
- المراجعة السنوية والمسئولين عنها.

PROGRAMME SPECIFICATION FOR POSTGRADUATE DEGREE

This specification provides a concise summary of the main features of the course and the learning outcomes that a typical candidate might reasonably be expected to achieve and demonstrate if he or she takes full advantage of the learning opportunities provided. More detailed information on the specific learning outcomes, context and the teaching, learning and assessment methods of each module can be found in the Programme Descriptions Handbook.



COURSE SPECIFICATION

Faculty of Medicine- Mansoura University

(A) Administrative information

(1) Programme offering the course.	Pediatric Surgery
(2) Department offering the programme.	Pediatric Surgery
(3) Department responsible for teaching the course.	Pediatric Surgery
(4) Part of the programme.	Second Part
(5) Date of approval by the Department's council	9/8/2016
(6) Course title.	Pediatric Surgery
(7) Course code.	PEDSUR 620 PEDS
(8) Total teaching hours.	255 Theoretical + 510 Clinical

(B) Professional information

(1) Course Aims.

The broad aims of the course are as follows.

1. Give an update theoretical idea in Pediatric Surgery and its specialties.
2. Recognize the epidemiology, racial and gender distribution of each pediatric surgical disease as an essential prerequisite for the development of effective control programs.
3. Describe the pathogenic potential, pathogenesis, clinical picture and complications of pediatric surgical problems.
4. Learn candidates the atypical presentations of different pediatric Surgical diseases.
5. Learn candidates the options of management both for Urgent and Cold cases.
6. Recognize the general surgical outlines of control on complicated surgical problems and their impact on better health, welfare and productivity of human being.
7. Understand the course & prognosis of pediatric surgical problems through a simplified manner.
8. Formulate medical students certain presentations of pediatric surgical diseases in different subspecialties as: Thoracic surgery, Neurosurgery, Plastic surgery, Urology & how to manage it.
9. Accept certain skills in different pediatric surgical specialties e.g Surgical oncology, Plastic surgery, general surgery, vascular, emergency, endocrinal surgery etc...
10. React with the environment through medical visits and try to control of certain diseases e.g. congenital megacolon via early diagnosis and effective treatment.

(2) Intended Learning Outcomes (ILOs):

Intended learning outcomes (ILOs); Are four main categories: knowledge & understanding to be gained, intellectual qualities, professional/practical and transferable skills.

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

A- Knowledge and Understanding

A1.Distinguish the gross features & geographical distribution of variable pediatric surgical diseases, and search about the environmental factors accused.

A 2 Explain the Molecular, biochemical, and cellular mechanisms which are important in maintaining the body homeostasis.

A 3 Design plans to deal with urgent cases safely & how to avoid complications.

A 4 Explain the major immunological responses of both viral and malignant diseases.

A 5 Recommend different options for management of different pediatric surgical diseases..

A 6 Formulate new lines of treatment and their method of application.

A7. Identify and manage opportunistic and nosocomial infections.

A8. Develop basic skills in different pediatric surgical specialties.

A9. Apply Basics of ethics, medico legal aspects of health problems, malpractice and common medical errors.

A10: Update his knowledge and follow recent advances in all domains of pediatric surgery and its specialties.

A 11: Comprehend all about perioperative management of surgical patient.

A 12: Predict possible post operative complications and plan for their prevention and management.

B- Intellectual skills

B1. : Recognize the skills to obtain and document a complete or focused medical history in the outpatient, inpatient or emergency settings.

B2: Interpret patient's symptoms and physical signs in terms of anatomic, pathologic and functional diagnostic significances.

B3: Identify surgical problems and select the most appropriate and cost effective diagnostic procedures for each problem.

B4: Analyze different items of differential diagnoses of pediatric surgical problems with prioritization of the common possibilities for each problem.

B5: Choose the suitable diagnostic techniques concerning the surgical problems encountered.

B6: Compare different treatment options and weighs the pros and cons of the proposed interventions.

B7. Recognize the essential steps and surgical tips to avoid intraoperative complications of different pediatric surgical procedures.

B8 Design guidelines for a control program for a particular pediatric surgical disease.

C- Professional/practical skills

C1. Obtain thorough clinical history that is well-directed towards the diagnostic purposes.

C2. Perform effective examination and elicit key signs for different pediatric surgical diseases.

C3: Analyze clinical investigations' findings in relation to possible courses of therapy including indications, risks, benefits and alternatives as well as plans for follow up.

C4: Write clear and concise medical records including: admission sheets, progress notes, and physician' orders, referrals for consultation, discharge summaries and follow up notes.

C5: Achieve consensus and obtain informed consent from the patient or the parents for the treatment plan.

C6: Perform independently various clinical and surgical procedures and know when and how to ask for senior consultation.

C7: Identify his/her personal weaknesses through accurate self-assessment and/or supervisors and colleagues and practice actively to address these weaknesses using the appropriate technological means.

C8: Update his/her knowledge utilizing the resources of biomedical information to improve his professional practice and to follow recent innovations in pediatric surgery.

C9: Formulate research hyposthesis and design different types of researches.

C10: Conduct patient and/ or parents interviews in a professional manner that is well directed to the clinical purposes.

D- Communication & Transferable skills

- D1** Deliver compassionate and non-judgmental care for all patients with respect for their privacy and dignity.
- D2** Treat the patient as a person, not as a disease and understand that patients are human beings with beliefs, values, goals and concerns which must be respected.
- D3** Be aware of the ethical behavior expected of doctors towards patients with recognition of patients' rights, particularly with regard to confidentiality and informed consent.
- D4** Attain the honesty and integrity in all interactions with patients, families, colleagues and others with whom the physician must interact in their professional life.
- D5** Develop written & oral presentations skills for both pediatric surgery professionals & other audiences.
- D6** Respect the role of other health care professionals, and the need to collaborate with others in caring of individual patients.
- D7** Recognize her/his limits of knowledge and experience by communication with his supervisors and colleagues aiming to update and improve her/his current medical practice.

(3) Course content:

Credit hours: 21 hours +15 hours Log boock.

Lectures: 255 hours

Clinical : 240 hours

OR: 270 hours

Module 1: Pediatric and neonatal general pediatric surgical conditions, pediatric trauma and pediatric tumors.

Credit hours: 8 hours.

Lectures: 60 hours

Clinical: 60 hours

OR: 60 hours

Title			
	Lectures	clinical	OR
<p>A) <u>General pediatric and neonatal surgical issues:</u></p> <ul style="list-style-type: none">● Pediatric surgical aspects of molecular Clinical Genetics and Gene Therapy.● Fetal surgery● Neonatal Physiology and Metabolic Considerations● Perioperative management of neonate in surgical NICU● Respiratory Physiology and Care● Neonatal Cardiovascular Physiology and Care● Sepsis and Related Considerations● Surgical Implications of Hematologic Disease● Ethical Considerations in pediatric surgery● Wound healing● Surgical nutrition● Homeostasis : Body changes in trauma & surgery.● Disorders of surgical bleeding.● Surgical infection &Antibiotics.● Shock● Postoperative complications	15	15	10

<p>B) <u>Trauma:</u></p> <ul style="list-style-type: none"> • Accident Victims and Their Emergency Management • Damage Control Surgery • Compartmental syndrome • Thoracic Injuries • Abdominal Trauma • Musculoskeletal Trauma • Hand, Soft Tissue, and Envenomation Injuries • Central Nervous System Injuries • Vascular Injury • Burns • Maxillofacial injures • Child Abuse and Birth Injuries 	15	20	20
<p>C)) <u>Pediatric tumors:</u></p> <ul style="list-style-type: none"> • Wilms' Tumor • Neuroblastoma • Liver Tumors • Gastrointestinal Tumors • Soft Tissue Tumors • Teratomas and Other Germ Cell Tumors • Hodgkin's Disease and Non-Hodgkin's Lymphoma • Ovarian Tumors • Testicular Tumors • Adrenal Tumors • Bone Tumors • Brain Tumors • Pelvi-abdominal Swelling • Retroperitoneal Tumors 	30	25	30

Module 2: : Pediatric transplantation and pediatric thoracic surgical conditions

Credit hours: 8 hours.

Lectures: 60 hours

Clinical : 60 hours

OR: 60 hours

Title			
	Lectures	clinical	OR
<p>A) <u>Pediatric transplantation:</u></p> <ul style="list-style-type: none"> • Principles of Transplantation • Renal Transplantation • Pancreas and Islet Cell Transplantation • Liver Transplantation • Intestinal Transplantation • Heart Transplantation • Lung Transplantation 	15	15	20
<p>B) <u>Head and neck:</u></p> <ul style="list-style-type: none"> • Craniofacial Anomalies • Cleft Lip and Palate • Salivary Glands • Lymph Node Disorders • Surgical Diseases of the Thyroid and Parathyroid Glands • Cysts and Sinuses of the Neck • Torticollis • Neck swellings 	20	20	20
<p>C) <u>Thorax:</u></p> <ul style="list-style-type: none"> • Disorders of the Breast • Congenital Chest Wall Deformities • Congenital Diaphragmatic Hernia and Eventration • Cysts of the Lungs and Mediastinum • Laryngoscopy, Bronchoscopy, and Thoracoscopy • Lesions of the Larynx, Trachea, and Upper Airway • Infections and Diseases of the Lungs, Pleura, and Mediastinum 	25	25	20

<ul style="list-style-type: none"> • Esophagoscopy and Diagnostic Techniques • Esophageal Rupture and Perforation • Congenital Anomalies of the Esophagus • Caustic Strictures of the Esophagus • Esophageal Replacement • Disorders of Esophageal Function • Gastroesophageal Reflux Disease • Hyperhydrosis 			
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Module 3: : Abdomen and abdominal wall

Credit hours: 10 hours.

Lectures: 75 hours

Clinical : 60 hours

OR: 90 hours

Title			
	Lectures	clinical	OR
<ul style="list-style-type: none"> • Abdomen and abdominal wall • Disorders of the Umbilicus • Congenital Defects of the Abdominal Wall • Inguinal Hernias and Hydroceles • Undescended Testis, Torsion, and Varicocele • Foreign Body Ingestion • Hypertrophic Pyloric Stenosis • Peptic Ulcer and Other Conditions of the Stomach • Neonatal intestinal obstruction • Intestinal obstruction in pediatrics • Bariatric Surgery in Adolescents • Duodenal Atresia and Stenosis — Annular Pancreas • Jejunoileal Atresia and Stenosis • Meconium Ileus • Meckel's Diverticulum • Intussusception • Disorders of Intestinal Rotation and Fixation • Short-Bowel Syndrome • Gastrointestinal Bleeding • Alimentary Tract Duplications • Mesenteric and Omental Cysts 	75	60	90

- Surgical aspects of Ascites
- Polypoid Diseases of the Gastrointestinal Tract
- Necrotizing Enterocolitis
- Crohn's Disease
- Ulcerative Colitis
- Primary Peritonitis
- Stomas of the Small and Large Intestine
- Atresia, Stenosis, and Other Obstructions of the Colon
- Appendicitis
- Constipation, Hirschsprung's Disease and Related
- Neuromuscular Disorders
- Anorectal Malformations
- Fecal incontinence
- Surgical disorders of anus, rectum and anorectal function.
- Surgical aspects of jaundice:
 - Biliary atresia.
 - Choledochal cyst
 - Gallbladder diseases and hepatic infections
- Portal hypertension
- Surgical conditions of the pancreas
- Surgical conditions of the spleen

Module 4: : Pediatric genito-urinary, minimally invasive and some special pediatric surgical conditions including cardiac, neurosurgical, orthopedic and vascular diseases.

Credit hours: 8 hours
 Lectures: 60 hours
 Clinical: 60 hours
 OR: 60 hours

Title			
	Lectures	clinical	OR
<p>A) <u>Genito-urinary disorders</u></p> <ul style="list-style-type: none"> • Renal Agenesis, Dysplasia, and Cystic Disease • Renal Fusions and Ectopia • Ureteropelvic Junction Obstruction • Renal Infection, Abscess, • Vesicoureteral Reflux • Urinary Lithiasis • Ureteral Duplication and Ureterocele • Megaureter and Prune-Belly Syndrome • Incontinent and Continent Urinary Diversion • Disorders of Bladder Function • Structural Disorders of the Bladder, Augmentation • Bladder and Cloacal Exstrophy • Hypospadias • Epispadias • Abnormalities of the Urethra, Penis, and Scrotum • Ambiguous Genitalia and intersex states • Abnormalities of the Female Genital Tract 	30	40	20
<p>B) <u>Special topics of pediatric surgery:</u></p> <ul style="list-style-type: none"> • Congenital Heart Disease and Anomalies of the Great Vessels • Management of Neural Tube Defects, • Hydrocephalus, and Central Nervous System Infections • Major Congenital Orthopedic Deformities • Amputations in Children • Congenital Defects of the Skin, Connective Tissues, Muscles, Tendons, bone and 	15	15	20

<p>Hands</p> <ul style="list-style-type: none"> • Conjoined Twins • Vascular access and vascular catheters • Vascular Anomalies: Hemangiomas and Malformations • Lymphatic Malformations • Arterial Disorders • Venous Disorders • Lymphatic Disorders • Carotid body tumor 			
<p>C) <u>Pediatric Minimally Invasive Surgery</u></p> <ul style="list-style-type: none"> • Instrumentation in Pediatric Endoscopic Surgery • Ergonomics in Pediatric Endoscopic Surgery • The Use of Robotics in Minimally Invasive Surgery • Pediatric Laparoscopy • Pediatric Thoracoscopy • GIT Endoscopy • Operative Fetoscopy 	15	5	20

2 credit hours for other activities of conferences, seminars, journal clubs.

(4) Teaching methods:

4.1.lectures

4.2. Seminars

4.3. Outpatient clinics.

4.4. Operation Room training.

(5) Assessment methods:

Assessment schedule:

MCQ exams: 60 marks.

Written exam:

2 papers (90 marks for each)

Commentary exam. 60 marks .

Clinical exam: 100 marks.

Practical exam. 100 marks.

Oral exam. 100 marks.

Other assessment without marks: logbook

(6) References of the course:

1) 6.1: Hand books: Operative Pediatric Surgery (Moritz Ziegler, Richard G. Azizkhan)

6.2: Text books.:

2) Operative Pediatric Surgery Seventh edition. (Lewis Spitz, Arnold Coran)

3) Ashcraft's Pediatric Surgery (George W. Hol Comb III)

4) Pediatric Surgery Seventh edition (Arnold G. Coran, N. Scott Adzick)

5) Operative Pediatric Surgery (Moritz Ziegler, Richard G. Azizkhan)

6.3: Journals:

1. Recent Advanced In Surgery.

2. Annals of Pediatric Surgery

6.1: Websites: www.rsmpress.co.uk.

6.2: Others: www.surgical.theclinics.com.

6.3: WWW.elsevier.com/permissions

(7) Facilities and resources mandatory for course completion:

Lecture halls

Outpatient clinics.

Operative theater

Skill lab.

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

Evaluator	Tools*	Signature
Internal evaluator (s) Prof.Dr. Mohammed El-Ghazaly Prof.Dr. Kamal Abd El-Elah Ass Prof.Dr. Adham El-Said	Focus group discussion Meetings	
External Evaluator (s) Prof. Gamal Eldin El-Tagy Prof. Sherif Shehata	Reviewing according to external evaluator checklist report.	
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.	
Programme coordinator: Ass Prof. Adham Ahmad Elsaid Lect. Hesham Mahmoud Sheir	Signature & date:
Head of pediatric surgery Department Prof. Dr. Mohamed El-Ghazaly Waly	
Dean: Prof. Dr. El Said Abdel Hady	Signature & date:
Executive director of the quality assurance unit: Prof.Dr. Seham Gad El-Hak	Signature & date: