Program specification for MSc degree of Pediatrics

(2022-2023)

1. Basic Information:

نموذج رقم (١٣)

1-University: Minia University

2-Faculty: Medicine

3-Department: Pediatrics

4- Program Title: Master degree in pediatrics

5- Final award: master degree in pediatrics

6-programme type: single

7- Responsible department: Department of pediatrics,

8-Departement involved in the program: Department of pediatrics, Medical physiology, pathology, Medical pharmacology, ,public health and preventive medicine, clinical pathology, microbiology and immunology, Medical biochemistry ,anatomy and embryology and Forensic medicine and medical toxicology departments

9-Program code: PE 200

10-Programme duration: 2 years

11 Program courses number:11

12- Coordinators:

Prof/ Sheren Esam Maher: professor of pediatrics

Ass prof /Madiha abdalla: Assistant professor of pediatrics

Ass lec /.shaimaa M Yassin : assistant lecturer of pediatrics

13- External evaluator: prof. Faheem Mouhamed Faheem

14-internal evaluation: Dr, Basma Adbel Moaz

15-Last date of program approval by department council: 4-2023

16- Last date of program approval by Faculty council: 4-2023

2. Program aims:

The aim of this program is to provide the postgraduate with the basic and advanced Pediatricknowledge and skills essential for the mastery of practice of Pediatric specialty.

3. Intended Learning Outcomes (ILOs):

Knowledge and understanding:

By the end of the study of doctoral program in pediatrics the graduate isexpected to be able to:

a.1 Discuss theories, basics and updated sciences in physiology of pediatrics.

a.2 Describe basics and updated sciences in pathology of pediatric diseases.

a.3 Enumerate the recent advances in clinical epidemiology related to the field of pediatrics.

a.4 Explain basics and updated sciences in anatomy and biology of pediatricdiseases.

a.5 Describe basics and updated sciences in biochemistry.

a.6 Describe basics and updated sciences in microbiology

a.7 Describe basics and updated sciences in pharmacology.

a.8 Discuss recent advances in etiology, clinical picture and management ofneonatal disorders.

a.9 Describe recent advances in the management and prevention of pediatricdiseases.

a.10 List the legal and ethical aspects of professional pediatric practice.

A. Intellectual skills

By the end of the study of doctoral program in pediatrics the Graduate is expected to be able to:

b.1 Interpret data acquired through history taking to reach a provisional diagnosis for pediatric problems.

b.2 Select from different diagnostic alternatives the ones that help reaching a final diagnosis for pediatric problems.

b.3 Conduct management plans in pediatric and neonatology

b.4 Write scientific papers in the area of pediatrics.

b.5 Assess risk in professional practices in the field of pediatrics.

b.6 Assess to quality improvement in the field of medical education of pediatrics.

b.7 Relate analytical thinking approach in clinical situations related to pediatrics.

b.8 Conduct scientific discussion based on scientific evidences and proofs.

b.9 Interpret researches related to pediatrics.

b.10 present data in front of experts.

B. Professional and practical skills

By the end of the study of Master program in pediatrics the graduate is expectedto be able to:

c.1 Practice the basic and advanced professional clinical skills in the area ofpediatrics.

c.2 Write competently and evaluate the medical reports.

c.3 Evaluate and improve methods and tools existing in the area of pediatrics.

c.4 Use the recent diagnostic and therapeutic technologies in pediatric clinical practice.

c.5 Train junior staff and plan to improve their performance through continuous medical education programs.

c.6 Perform competently all medical and invasive procedures consideredessential for pediatrics related conditions.

c.7 Communicate effectively and respectively with pediatric patients and their families.

c.8 Provide health care services for preventing pediatric related health problems,

c.9 Construct an advanced level of patients' care for common pediatricdiagnosises.

c.10 Provide an advanced level of patients' care for complicated pediatricpatients

c.11 Handle unexpected complications during management of patients.

General and transferable skills

By the end of the study of Master program in pediatrics, the Graduate isexpected to be able to:

d.1 Communicates effectively by different types of communication skills.

d.2 Use appropriate computer program packages and the internet to serve the development of professional practice.

d.3 Teach others and evaluate and improve their performance.

d.4 Council families and educate patients about their conditions.

d.5 Use different sources of information and knowledge.

d.6 Work successfully in a team and also as a team leader .

d.7 Manage scientific meetings according to the available time.

d.8 Design logbooks.

d.9 Design standardized protocol for pediatric patients' management.

d.10 Compute with others for improvement of health services

4. Program Academic Reference Standards:

Faculty of Medicine, Minia university adopted the general National Academic Reference Standards provided by the national authority for Quality Assurance And Accreditation of Education (NAQAAE) for all postgraduate programs (Faculty council degree No.6854,in its cession No.177 dated :18/5/2009).(Annex 1)

Minia faculty of medicine has developed the academic standers

(ARS) for medical master (MSC)program and approved in faculty council degree No 7528 ,in its session No 191 ,dated 15-3-2010),last update 20-2-2023 (Annex 1)

Then, medical pediatric department has developed the intended learning outcomes (ILOS)for master (MSC) program in pediatrics and the date of program specifications first approval was by department council :13-5-2013, last updated :3-4-2023) (Annex 2).

5. Curriculum structure and contents:

A. Program duration: 2 years

B. Program courses: (1st part: Genetics and fetal growth and development for normal infant and children, physiology, pathology ;applied pharmacology ,public health(preventive medicine ,nutrition and statistics related to pediatrics , ,neonatology, clinical pathology, microbiology and immunology,medical biochemistry and medical ethics).

2nd part: Pediatric and infection diseases, management of nutritional disorders

 # Total number of hours :1104

First part :

Academic 11H/W, practical 5H/W,

Second part:

Academic (7H/W) practical (9H/W) total hours

Compulsory courses: 100% Optional courses: N/A Elective courses: N/A

- Students have to pass the final written exam to be eligible to sit the oral and clinical

exams.

- If the student fails to pass the clinical and oral exams for 4 times, he/shehas to repeat the final written exam again.
- Final written exams degree and the case solving are all added together.
- Total degrees 1000 marks: (1^{st} part 300 ,2^{nd} part 700).
- The student passes if he /she gets 60% from summative written examsand 60% from oral and clinical exams.

- Curriculum structure:

	Course name	Number of hours			level
		Lectures	Training	Total	
Public health	Public health (preventive medicine, nutrition and statistics related to pediatrics	48	48	96	**First part**
Anatomy	Genetics and fetal growth and development for normal infant and children,	48	-	33	
Medical Physiology	Basic physiology	24	20	44	
Pathology	Basic Pathology	12	-	12	
Pharmacology	Applied pharmacology and drugs information	24	-	24	
Microbiology	Basic microbiology and Immunology	20	-	20	
Medical Biochemistry	Biochemistry of metabolicdisorders	30	-	30	
Clinical pathology	Clinical pathology	28	20	48	
Pediatric	Neonatology	24	48		
Forensic medicine	Medical ethics	30	15	45	
Pediatric	**Pediatric and infection diseases**	270	360	630	**2nd part**
	Management of nutritional disorders	45	45	90	
	Thesis and at least one published research				**Third part**

6- Program Admission requirements:

1. General requirements:

A. Candidates should have either:

1. MBBCH degree from any Egyptian faculty of medicine or
2. Equivalent degree from medical schools abroad approved by the ministry of higher education
3. Follows postgraduate regulatory rules of Minia faculty of medicine.

2. Specific requirements:

A. Candidates graduated from Egyptian universities should "Good Rank" in their final year/cumulative year examination and grade "Good Rank "in pediatric course too.

B. Candidate should know how to speak and write English well.

C. Candidate should have computer skills.

7 Regulations for progression and program completion

Duration of program is (2years), starting from registration till the second part exam; divided to:

First Part: (≥6 months):

- All courses as specified in the internal bylaw
- At least six months after registration should pass before the student can ask for examination in the 1st part
- Two sets of exams: 1st in April — 2nd in October.
- For the student to pass the first part exam, a score of at least 60% in each curriculum is needed (with at least 40% in the written exam).
- Those who fail in one curriculum need to re-exam it only.

Thesis/essay:

- Start from registration and should be completed, and accepted at least after passing 6 months from protocol registration till at least one month before allowing to enter 2nd part final exam.

- Accepting the thesis occurs after publishing one thesis – based paper in local or international journal and this is enough to pass this part.

Second Part: (≥18 months):

- Program related specialized Courses.
- Actual work for 18 months as a demonstrator /trainee in the department
- The student should pass the 1st part before asking for examination in the 2nd part.
- Two sets of exams: 1st in April— 2nd in October.
- For the student to pass the second part exam, a score of at least 60% in each curriculum is needed (with at least 40% in the written exam).
- Fulfillment of the requirements in each course as described in the template and registered in the log book is a prerequisite for candidates to be assessed and undertake part 1 and part 2 examinations; as following:
    a. Training courses along the duration of the program
    b. Seminars
    c. Thesis discussion
    d. Workshops
    e. Conference attendance
    f. Journal club
    g. Other scientific activities requested by the department

9- Teaching with learning Method

1. Lectures
2. Seminar presentation and journal club
3. Group Discussion
4. Pediatrics conferences
5. Skill Teaching in ICU , emergency , ward settings.
6. Attend Combined clinics and round .

10-Methods of student assessments and weighting of assessment:

Method of assessment

1-Written Exams:
- -Short essay
- -MCQs
- -Problem solving

2-Practical Exams.

3-Oral Exams

Weighting assessment:

Degree				Courses
Total		Oral Exam	Written Exam	
25		15	10	Medical Physiology
25		15	10	Pathology
75		45	30	Epidemiology and Biostatistics

25		15	10	Clinical pathology
25		15	10	Medical Biochemistry
25		15	10	Pharmacology
25		15	10	Microbiology and immunology
37.7		22.5	15	Genetics, fetal growth and development
37.5		22.5	15	Neonatology
100%		60%	40%	Medical ethics
300		180	120	Total
Total	Clinical	Oral	Written exam	
420	200	220	100 90 90	Pediatrics Paper 1 Paper2 Paper 3
700	200	220	280	Total

11- Methods of program Evaluation

Evaluator	**Tool**	**Sample**
1- Senior students	Questionnaire	All the students
2- Graduate (Alumni)	Questionnaire	10 at least
3- Stakeholders	Meeting Questionnaire	10 at least
4-External &Internal evaluators and External Examiners	Report	1 at least
5- Quality assurance unit	Reports Questionnaires Site visits	
6-Exam results	Results analysis report	All students

Course Coordinator:

Prof/ Sheren Esam Maher: professor of pediatrics

Ass prof /Madiha abdalla: Assistant professor of pediatrics

Dr/shaimaa Mohamed yassin

12-Head of Department:

Head of department

Prof. Mohd A. Maaboud

Date of last update & approval by department council:4/4/2023

Date of last update & approval by faculty council

MATRIX I: Comparison between National Academic Quality Assurance & Accreditation (NAQAAE) General Academic Reference Standards (GARS) and Faculty Academic Reference Standards (ARS)

NAQAAE برامج الماجستير	Faculty Master (MSC) Program
١. مواصفات الخريج: خريج برنامج الماجستير في أي تخصص يجب أن يكون قادرا على:	**1. Graduate Attributes:** Graduate of master (MSC) program should be able to:
1.1. إجادة تطبيق أساسيات ومنهجيات البحث العلمي واستخدام أدواته المختلفة.	1.1. understanding and applying of basics of research method and research tools
2.1. تطبيق المنهج التحليلي واستخدامه في مجال التخصص	2.1.Critically analyze, evaluate, and effectively communicate findings, theories, and methods
3.1. تطبيق المعارف المتخصصة و دمجها مع المعارف ذات العلاقة في ممارسته المهنية.	3.1. Apply integrated professional and general knowledge in his scholarly field and at the interface between different fields.
4.1. إظهار وعيا بالمشاكل الجارية والرؤى الحديثة في مجال التخصص.	4.1. Demonstrate awareness of community health needs related to the field of specialization by understanding the beneficial interaction with the society to improve quality of life
5.1. تحديد المشكلات المهنية وإيجاد حلولا لها.	5.1. Demonstrating proficiency, required to solve current complex problems in his scholarly field.

6.1. إتقان نطاق مناسب من المهارات المهنية المتخصصة واستخدام الوسائل التكنولوجية المناسبة بما يخدم ممارسته المهنية.	6.1. Master a variety of technical skills in his scholarly field and expert relevant equipment, technology, and software.
7.1. لتواصل بفاعلية والقدرة على قيادة فرق العمل.	7.1. Gain leadership skills and be able to communicate efficiently with colleagues and get the best results.
8.1. اتخاذ القرار في سياقات مهنية مختلفة.	8.1. Take professional situational decisions and logically support them.
9.1. توظيف الموارد المتاحة بما يحقق أعلي استفادة و الحفاظ عليها	9.1. Optimal use of available resources to achieve research or best patient health care and ensure its maintenance.
10.1. إظهار الوعي بدوره في تنمية المجتمع والحفاظ على البيئة في ضوء المتغيرات.	10.1. Demonstrate awareness of its role in community health development and
11.1. التصرف بما يعكس الالتزام بالنزاهة والمصداقية والالتزام بقواعد المهنة.	11.1. Exhibit ethical behavior that reflect commitment to the code of practice
12.1. تنمية ذاته أكاديميا ومهنيا و قادرا علي التعلم المستمر.	12.1. demonstrate the ability to sustain a lifelong personal and professional growth.
٢.المعايير القياسية العامة: **NAQAAE General Academic Reference Standards "GARS" for Master Programs**	**2. Faculty Academic Reference Standards (ARS) for Master Program**
٢,١. المعرفة والفهم: بانتهاء دراسة برنامج الماجستير يجب أن يكون الخريج قادرا علي الفهم والدراية بكل من:	**2.1. Knowledge & Understanding:** Upon completion of **the Master Program** the graduate should have sufficient knowledge and understanding of:
٢,١,١. النظريات والأساسيات والحديث من المعارف في مجال التخصص والمجالات ذات العلاقة	2.1.1. Understand the scientific basis and modern knowledge in the field of specialization and related medical sciences
٢,١,٢. التأثير المتبادل بين الممارسة المهنية وانعكاسها علي البيئة	2.1.2. The mutual influence of professional practice on work environment, working conditions, and job characteristics.
٢,١,٣. التطورات العلمية في مجال التخصص	2.1.3. Scientific developments in the field of specialization

٢,١,٤. المبادئ الأخلاقية والقانونية للممارسة المهنية في مجال التخصص	2.1.4. Recognize basics of medico-legal aspects of practice, malpractice and avoid common medical errors
٢,١,٥. مبادئ وأساسيات الجودة في الممارسة المهنية في مجال التخصص	2.1.5. Quality principles in the scholarly field
٢,١,٦. أساسيات وأخلاقيات البحث العلمي	2.1.6. Basis of research methodology and medical ethics.
2.2.المهارات الذهنية: بانتهاء دراسة برنامج الماجستير يجب أن يكون الخريج قادرا على:	**2.2. Intellectual Skills:** Upon completion of the master program, the graduate should be able to:
2.2.1.تحليل وتقييم المعلومات في مجال التخصص والقياس عليها لحل المشاكل	2.2.1. Use judgment skills for analytical and critical problem solving
2.2.2.حل المشاكل المتخصصة مع عدم توافر بعض المعطيات	2.2.2. Capable of integrating knowledge and dealing with complex subjects to solve problems
2.2.3الربط بين المعارف المختلفة لحل المشاكل المهنية	2.2.3. Be capable of integrating research results and/or results of history, physical and laboratory test findings to solve a research or a clinical problem.
2.2.4.إجراء دراسة بحثية و/أو كتابة دراسة علمية منهجية حول مشكلة بحثية	2.2.4. Effectively apply research methods and carrying out a medical research thesis
2.2.5.تقييم المخاطر في الممارسات المهنية في مجال التخصص	2.2.5. Be aware of risk management principles, and patient safety.
2.2.6.التخطيط لتطوير الأداء في مجال التخصص	2.2.6. Establish goals, commitments, and strategies for improved professional performance in the field of specialty
2.2.7.اتخاذ القرارات المهنية في سياقات مهنية متنوعة.	2.2.7. Take professional situational decisions and logically support them.
3.2.المهارات المهنية: بانتهاء دراسة برنامج الماجستير يجب أن يكون الخريج قادرا على:	**3.2. Professional Skills:** Upon completion of the master program, the graduate must be able to:
3.2.1.إتقان المهارات المهنية الأساسية والحديثة في مجال التخصص.	3.2.1. Master the basic and some advanced professional skills in his scholarly field.
٣,٢,٢كتابة و تقييم التقارير المهني.	3.2.2. Write and evaluate medical or scientific reports

٢,٣,٣تقييم الطرق والأدوات القائمة في مجال التخصص	3.2.3. Assess and evaluate technical tools during research
4.2.المهارات العامة والمنتقلة **:** بانتهاء دراسة برنامج الماجستير يجب أن يكون الخريج قادرا على:	4.2. **General and transferable skills** Upon completion of the master program, the graduate should be able to:
٤,٢,١. التواصل الفعال بأنواعه المختلفة	4.2.1. Communicate effectively using a written medical record, electronic medical record, or other digital technology.
٤,٢,٢. استخدام تكنولوجيا المعلومات بما يخدم الممارسة المهنية	4.2.2. Use of information technology (computer to create, process, store, secure and exchange electronic data) in the field of medical practice.
4.2.**3**. لتقييم الذاتي وتحديد احتياجاته التعلمية الشخصية	4.2.3. Assess himself and identify personal learning needs
4.2.**4**. استخدام المصادر المختلفة للحصول على المعلومات والمعارف	4.2.4. Use various sources for information (physical and digital sources).
4.3.**5**. وضع قواعد ومؤشرات تقييم أداء الآخرين	4.2.5. Setting indicators for evaluating the performance of others
4.2.**6**. العمل في فريق، وقيادة فرق في سياقات مهنية مختلفة	4.2.6. Work in a team, and Apply leadership skills to enhance team functioning, the learning environment, and/or the health care delivery system
4.2.**7**. إدارة الوقت بكفاءة	4.2.7. Manage time efficiently
4.2.8. التعلم الذاتي والمستمر	4.2.8. Demonstrate skills of self-learning and lifelong learning needs of medical profession.

MATRIX II: NAQAAE Vs. ARS VS. MSc PROGRAM ILOS of Pediatrics

NAQAAE برامج الماجستير	Faculty ARS for Master (MSC) Program	MSc Program of pediatrics
٢.المعايير القياسية العامة: **NAQAAE General Academic Reference Standards "GARS" for Master Programs**	**2. Faculty Academic Reference Standards (ARS) for Master Program**	**ILOS of pediatrics**
٢,١. المعرفة والفهم: بانتهاء دراسة برنامج الماجستير يجب أن يكون الخريج قادرا علي الفهم والدراية بكل من:	**2.1. Knowledge & Understanding:** Upon completion of **the Master Program** the graduate should have sufficient knowledge and understanding of:	**2.1. Knowledge & Understanding:** Upon completion of **the Master Program of pediatrics** the graduate should be able to:
٢,١,١. النظريات والأساسيات والحديث من المعارف في مجال التخصص والمجالات ذات العلاقة	2.1.1. Understand the scientific basis and modern knowledge in the field of specialization and related medical sciences	a.1Describe theories, basics and updated sciences in physiology of pediatrics. a.2 Describe basics and updated sciences in pathology of pediatric diseases.
٢,١,٢. التأثير المتبادل بين الممارسة المهنية وانعكاسها علي البيئة	2.1.2. The mutual influence of professional practice on work environment, working conditions, and job characteristics.	a.3Enumerate the recent advances in clinical epidemiology related to the field ofpediatrics. a.4Describe basics and updated sciences in anatomy and biology of pediatricdiseases.
٢,١,٣. التطورات العلمية في مجال التخصص	2.1.3. Scientific developments in the field of specialization	a.5Describe basics and updated sciences in biochemistry. a.6 Describe basics and updated sciences in microbiology
٢,١,٤. المبادئ الأخلاقية والقانونية للممارسة المهنية في مجال التخصص	2.1.4. Recognize basics of medico-legal aspects of practice, malpractice and avoid common medical errors	a.7 Describe basics and updated sciences in pharmacology. a.8 Discuss recent advances in etiology ,clinical picture and management of neonatal disorders.
٢,١,٥. مبادئ وأساسيات الجودة في الممارسة المهنية في مجال التخصص	2.1.5. Quality principles in the scholarly field	a.9 Describe recent advances in the management and prevention of pediatric diseases.
٢,١,٦. أساسيات وأخلاقيات البحث العلمي	2.1.6. Basis of research methodology and medical ethics.	a.10 Name the legal and ethical aspects of professional pediatric practices
2.2.المهارات الذهنية: بانتهاء دراسة برنامج الماجستير يجب أن يكون الخريج قادرا على:	**2.2. Intellectual Skills:** Upon completion of the master program, the graduate should be able to:	**2.2. Intellectual skills:** Upon completion of **the Master Program of pediatrics** the graduate should be able to :
2.2.1.تحليل وتقييم المعلومات في مجال التخصص والقياس عليها لحل المشاكل	2.2.1. Use judgment skills for analytical and critical problem solving	b.1 Interpret data acquired through history taking to reach a provisional diagnosis for pediatric problems. b.2 Select from different diagnostic alternatives the ones that help reaching a

		final diagnosis for pediatric problems.
2.2.2.حل المشاكل المتخصصة مع عدم توافر بعض المعطيات	2.2.2. Capable of integrating knowledge and dealing with complex subjects to solve problems	b.3 conduct management plans in pediatric and neonatology b.4 write scientific papers in pediatrics
2.2.3الربط بين المعارف المختلفة لحل المشاكل المهنية	2.2.3. Be capable of integrating research results and/or results of history, physical and laboratory test findings to solve a research or a clinical problem.	b.5 Assess risk in professional practices in the field of pediatrics b.6 Assess to quality improvement in the field of medical education of pediatrics.
2.2.4.إجراء دراسة بحثية و/أو كتابة دراسة علمية منهجية حول مشكلة بحثية	2.2.4. Effectively apply research methods and carrying out a medical research thesis	B7.Relate analytical thinking approach in clinical situations related to pediatrics.
2.2.5.تقييم المخاطر في الممارسات المهنية في مجال التخصص	2.2.5. Be aware of risk management principles, and patient safety.	b.8Conduct scientific discussion based on scientific evidences and proofs.
2.2.6.التخطيط لتطوير الأداء في مجال التخصص	2.2.6. Establish goals, commitments, and strategies for improved professional performance in the field of specialty	b.9Interpret researches related to pediatric
2.2.7.اتخاذ القرارات المهنية في سياقات مهنية متنوعة.	2.2.7. Take professional situational decisions and logically support them.	B 10present data in front of experts.
3.2.المهارات المهنية: بانتهاء دراسة برنامج الماجستير يجب أن يكون الخريج قادرا على:	**3.2. Professional Skills:** Upon completion of the master program , the graduate must be able to:	**3.2. Professional and practical skills:** **Upon completion of the Master Program of pediatrics** **the graduate should be able to :**
3.2.1.إتقان المهارات المهنية الأساسية والحديثة في مجال التخصص.	3.2.1. Master the basic and some advanced professional skills in his scholarly field.	c.1 Practice the basic and advanced professional clinical skills in the area of pediatrics. c.2 Write competently and evaluate the medical reports. c.3 Evaluate and improve methods and tools existing in the area of pediatrics. c.4 Use the recent diagnostic and therapeutic technologies in pediatric clinical practice.
٣,٢,٢كتابة و تقييم التقارير المهني.	3.2.2. Write and evaluate medical or scientific reports	c.5 Train junior staff and plan to improve their performance throughcontinuous medical education programs. c.6 perform competently all medical and invasive procedures consideredessential for pediatrics related conditions. c.7 communicate effectively and respectively with pediatric patients and their families. c.8 provide health care services for preventing pediatric related health problems,

٢,٣,٣تقييم الطرق والأدوات القائمة في مجال التخصص	3.2.3. Assess and evaluate technical tools during research	c.9 construct an advanced level of patients' care for common pediatricdiagnoses. c.10 provide an advanced level of patients' care for complicated pediatricpatients c.11 Handle unexpected complications during management of patients.
4.2.المهارات العامة والمنتقلة **:** بانتهاء دراسة برنامج الماجستير يجب أن يكون الخريج قادرا على:	4.2. **General and transferable skills** Upon completion of the master program, the graduate should be able to:	**4.2 General and transferable skills:** **Upon completion of the Master Program of pediatrics the graduate should be able to :**
٤,٢,١. التواصل الفعال بأنواعه المختلفة	4.2.1. Communicate effectively using a written medical record, electronic medical record, or other digital technology.	.d1 Communicates effectively by different types of communication skills.
٤,٢,٢. استخدام تكنولوجيا المعلومات بما يخدم الممارسة المهنية	4.2.2. Use of information technology (computer to create, process, store, secure and exchange electronic data) in the field of medical practice.	d.2 Use appropriate computer program packages and the internet to serve the development of professional practice.
4.2.3. لتقييم الذاتي وتحديد احتياجاته التعلمية الشخصية	4.2.3. Assess himself and identify personal learning needs	d.3 Teach others and evaluate and improve their performance.
4.2.4. استخدام المصادر المختلفة للحصول على المعلومات والمعارف	4.2.4. Use various sources for information (physical and digital sources).	d.4 Council families and educate patients about their conditions.
4.3.5. وضع قواعد ومؤشرات تقييم أداء الآخرين	4.2.5. Setting indicators for evaluating the performance of others	d.5 Use different sources of information and knowledge. .
4.2.6. العمل في فريق، وقيادة فرق في سياقات مهنية مختلفة	4.2.6. Work in a team, and Apply leadership skills to enhance team functioning, the learning environment, and/or the health care delivery system	. d.6 Work successfully in a team and also as a team leader
4.2.7. إدارة الوقت بكفاءة	4.2.7. Manage time efficiently	d.7 Manage scientific meetings according to the available time.
٤,٢,٨.التعلم الذاتي والمستمر	4.2.8. Demonstrate skills of self-learning and lifelong learning needs of medical profession.	d.8 Design logbooks. d.9 Design standardized protocol for pediatric patients' management. d.10 Compute with others for improvement of health services

Annex 3– Matrix between program courses and program ILOs

Courses	ILOs			
	Knowledge & Understanding **A**	**Intellectual skills** **b**	**Practical skills** **c**	**General skills** **D**
1. Medical Physiology	a 1	-	-	d 5
2. Pathology	,a2	b1-b5	C4	d 5
3. Public health	,a3	b1-b5	C7	d 7,d9
4. Anatomy and embryology	,a4	b1-b5	C4-c5	d1,d5
5. Medical Biochemistry.	a 5	b1-b7	C4	d1-d5
6. Microbiology and immunology.	a 6	b1	C3	d 5
7. Medical Pharmacology	a 7	-	C3	D5
8. Neonatology.	A 8	b1-b2	C1-c2-c4-c11	d1-d9
9. Clinical pathology	a 9	b1-b10	C 3-c5	d1-d10
10. Medical ethics.	a10	b3	-	d1-d3
11. Pediatrics: Pediatric and infection diseases and Management of nutritional disorders	A1-A10	B1-B10	C1-C11	D1-D10

Annex 4-Matrix between teaching learning methods

Methods of Teaching & Learning	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	**B. Intellectual Skills**	**C. Professional & Practical skills**	**D. General & Transferable Skills**
	A	**B**	**C**	**D**
Lecture, Seminar presentation and journal club, Group Discussion Pediatrics conferences	A.1 TO A.10	B.1 TO B.10		D.1-to D10
Practical (clinical examination, OSCI)			C1 to C11	D1-D5
Assignment	A.1TO A.10	B.1 TOB.7	C1 to C10	D.1 TO D.7

Annex 5- Matrix between Methods of student Assessment and program ILOs

Methods of Assessment	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	**B. Intellectual Skills**	**C. Professional & Practical skills**	**D. General & Transferable Skills**
	A	**B**	**C**	**D**

Written Paper based exam	A.1TO A.10	B.1 TOB.7		
Practical exam (long case, short cases, OSCI)			C1 to C11	D2-D7
Oral Exam	A.1TO A.10	B.1 TOB.10		D.1 TO D.10

Pediatric Course (2nd part)

University: Minia

Faculty: Medicine

Department: Paediatrics **Last date of approval: 3-1-2023**

1. Basic Information		
• **Academic Year/level:** Master degree **(2nd part)**	• **Course Title**: Pediatric	• **Code**: PE 200
• **Number of teaching hours:** - **Lectures:** 7 hour /week - **Practical:** 9 hours /week		
2. course Aims	The main activities of pediatric course delivered to medical students are: a. To support acquisition of basic knowledge of normal and abnormal growth and development and its application from birth through adolescence. b. To provide students with an appropriate background covering the common and important pediatric diseases and emergencies. c. To enable the development and application of appropriate professional attitudes, communication and problem-solving skills. d. To enable students to provide basic health care for individuals of the pediatric age group.	

3. Course ILOs: *Upon completion of the course, the student should be able to:*	
A- Knowledge and Understanding	When the student finishes the course, he will be able to achieve the following objectives: A.1-Describe normal growth and development in infancy, childhood and adolescence. And recognize appropriate management for abnormalities affecting growth and development. A .2- Recognize and understanding of the impact of congenital and inherited diseases on children and their families. A .3-. Discuss the nutritional requirements and the most common nutritional disorders affecting infancy and children and describe appropriate management for disorders. A4- Describe the indications and, contraindications, administration and precautions of immunization necessary for infants and children according to the national schedule and condition of the infant. A.5 Recognize the most important behavioral and social issues during childhood and adolescence. A.6, Describe the management priorities for different neonatal and pediatric emergencies. A.7, List the causes and pathogenesis of the most important neonatal and pediatric problems and the symptoms and signs of the different neonatal and pediatric problems. A.8 Identify the appropriate diagnostic tools

	(and describe how they will be interpreted) and therapeutic lines for the most important neonatal and pediatric problems.
B- Intellectual	B.1. Interpret the most important symptoms and signs of diseases in pediatric patients. B.2. Compare appropriate management plans for individual patients presenting with the most important pediatric disorders. B.3. Schedule management regarding common clinical situations using appropriate problem-solving skills. B.4. Interpret X-rays and blood picture reports covering the most important pediatric conditions.
C- Professional and Practical Skills	**C.1**- Measure vital signs and assess anthropometric measures in neonates, infants, children and adolescence **C.2 A**ssess physical and mental development in neonates, infancy, children and adolescence according to milestone **C.3** Assess the nutritional status of infants and children. **C.4**,Recognize different neonatal and pediatric emergencies and schedule appropriate management for them. **C.5**, Construct a proper history for a patient in pediatric age group. **C.6** Perform an adequate clinical examination for a patient in the Pediatric age group and identify deviations from normal. **C.7**, Interpret patient's data in an organized and informative manner**.** **C.8 Classify** and describe appropriate treatment for sick children according to the principles of integrated management of childhood illness.

D- General and transferable Skills	**D.1**, Communicate effectively with the children, adolescents and his family using appropriate communication skills and organize patient's data in informative manner. **D2** Demonstrate appropriate professional attitudes and behaviors in different practice situations **D.3** Communicate with different websites for pediatrics.

4- Course content

Topic	Lectures hours/week	Practical and clinical hours/week	**ILOs**
Growth and development	23	7	**A.1, a2 ,a3,B.1,B.2,,C.1,C.2**
Nutrition	14	7.6	**A.3, B.1,B.2,B.3,C.3,d1**
Social and prevented	13	7	**A.4,B.1,B.2,B.3,B.4,C.2,c5,d1**
Pediatric gastroenterology&hepatology	23	35	**A5,,B.1,B.2,B.3,,C.2,D.1,D.2,D.3 A1,A2**
Pediatric nephrology, urology, gynecological medicine	23	35	**A.2,A.6,A.7,A.8,B.1,B.2,B.3,B.4,C.1**
Pediatric neurology&psychology	23	35	**A2,B.1,B.2,C1,c2**
Pediatric hematology	27	35	**A2,B.1,B.2,B.3,C1,c2**
Pediatric cardiology	23	35	**A2, B.1,B.2,B.3. C1,c2**
Pediatric pulmonolgy	23	35	**A2, B.1,B.2,B.3. C1,c2**
Pediatric endocrinology	23	35	**A1,a2,a3 B.1,B.2,B.3,C1,c2**
Genetics	13	6	**A1,a2. B.1,B.2,B.3,B.4 c1,c2,C.5,C.6,C.7,C.8**
Neonatology	24	35	**A1,a2. B.1,B.2,B.3,B.4 c1,c2,C.5,C.6,C.7,C.8**
Immunology and Rheumatology	23	7.3	**A.6,A.7,A.8,B.1,B.2,B.3,B.4,C.5,C.6, C.7,C.8**
Infection	27	35	**A.1,a2B.1,B.2,B.3,B.4 ,C.5,C.6,C.7,C.8,D.1,D.2,D.3**
Total	315(7H/w)	405(9H/w)	

5.Teaching and Learning Methods	1. Lectures 2. Seminar presentation and journal club 3. Group Discussion 4. Grand Round 5. Pediatrics conferences 6. Skill Teaching in ICU , emergency , ward settings. 7. Attend Combined clinics and round .

7.Student Assessment	
A. Student Assessment	7.1-clinical round exam to assess clinical achievement after clinical round for each group. It includes Multiple stations : 4 short cases. Multiple skill lab stations: X ray, laboratory reports and practical skills evaluation. \7-2-Final exam: It includes • Written short essay questions • Two short cases clinical exam • One long case • Oral exam. • X-rays exam.
B. Assessment schedule	Assessment 1: written paper exam Assessment 2: written paper 2 Assessment 3: written paper 3
C. Weighting of Assessment	• **Final- term written exam 280** • **Clinical exam 200** • **Oral exam 220**
7. List of References	
A. Course Notes/handouts	1- Course notes and handouts by staff members of the department. 2- Practical notes by staff members of the department.
B. Essential books	Course notes by staff members of pediatric department
C. Recommended Books	Essential Nelson text book of pediatric
D. Periodicals, websites	WWW.pupmed.com

Course Coordinator: prof. Shereen Essam

Ass prof: Madiha Abdulla

Ass lect:shaimaa M Yassin

Head of Department: prof. Mohd Abdel Maaboud

9- Matrix between course topics and course ILOs

Topics	ILOs			
	Knowledge & Understanding A	**Intellectual skills b**	**Practical skills C**	**General skills d**
Part I: The Field of Pediatrics:	a3	-	-	d3
Part II: Growth, Development, and Behavior:	**A.1, a2**	b1-b2	c1,c2	d1
Part III: Social and preventive	**A.4,**	b1-b2,b3,b4	C2,c5	d1
PART IV: Nutrition	**A.3,**	b1-b2,b3	C3	d1
Part V: Human Genetics:	**A1,a2.**	**B.1,B.2,B.3,B .4**	**c1,c2,C.5,C.6 ,C.7,C.8**	-
Part VI: Perinatal and Neonatal Medicine	**A1,a2.**	**B.1,B.2,B.3,B .4**	**c1,c2,C.5,C.6 ,C.**	D2
Part VII: Immunology Allergy Rheumatology	**A.6,A.7,A.8**	**B.1,B.2,B.3,B .4**	**C.5,C.6,C.7, C.8**a1-	-
Part VIII: Infectious Diseases:	**A.1,a2**	**a2B.1,B.2,B.3 ,B.4**	**C.5,C.6,C.7, C.8,**	**D.1,D.2,D.3**
Part IX: The Digestive System	**A5,**	**B.1,B.2,B.3,**	C2	**D.1,D.2,D.3**
Part X: Respiratory System:	**A2**	**, B.1,B.2,B.3.**	c1-c2	-
Part XI: The	**A2**	**, B.1,B.2,B.3**	c1-c2	

Cardiovascular System				
Part XII: Hematology	**A2**	**,B.1,B.2,B.3**	c1-c2	
Part XIII: Nephrology	**A.2,A.6,A.7,A .8,**	**B.1,B.2,B.3** b4	C1	-
Part XIV: The Endocrine System	**A2**	**, B.1,B.2,B.3**	c1-c2	-
Part XV: Neurology	**A2,**	**B.1,B.2**	c1-c2	-

10- Matrix between teaching learning methods and ILOs

Methods of Teaching & Learning	**Intended Learning Outcomes (ILOs)**			
	A. Knowledge & Understanding	**B. Intellectual Skills**	**C. Professional & Practical skills**	**D. General & Transferable Skills**
	A	**B**	**C**	**D**
Lecture, in ward teaching, skill lab teaching lectures	A.1 TO A8	B.1 TOB.4		D.1-to D3
Practical, outpatient clinic			C1 to C8	
Assignment	A.1TO A.4	B.1 TOB.4	C1 to C8	D.1 TO D.3

11-Matrix between student assessment and ILOS:

Methods of Assessment	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
	A	B	C	D
Written exam	A.1TO A.3	B.1 TOB.4		
Practical exam			C1 to C8	
Oral Exam	A.1TO A.3	B.1 TOB.4		D.1 TO D.3

Blueprint of pediatric 2nd part Master

	Topics	HOURS	Knowledge %	Intellectual %	% of topics	Mark	Actual mark
1	Growth and development	23	80	20	7.4	5	14
2	Nutrition	24	70	30	7.6	5	14
3	Neonatology	24	70	30	7.6	80	45
4	Genetics	13	70	30	4.2	5	14
5	Nephrology	23	70	30	7.4	5	14
6	Cardiology	23	80	20	7.4	7.1	20
7	Respiratory	23	70	30	7.4	7.1	20
8	Haematology	27	80	20	8.6	7.1	20
9	Rheumatology and immunology	23	70	30	7.4	٥	14
10	Social and preventive	13	75	25	4.2	٨٠	45
11	Infection	27	75	25	8.6	7.1	20
12	Endocrine	23	80	20	7.4	5	14
13	Neurology	23	70	30	7.4	7.1	20
14	Gastroenterology	23	80	20	7.4	7.1	20
	Total	**312**			**100%**		**280**

Pediatric course 1st master

University: Minia

Faculty: Medicine

Department: Pediatrics **Last date of approval: 3-1-2023**

<table>
<tr><td colspan="3">4. Basic Information</td></tr>
<tr><td>• Academic Year/level: Master degree</td><td>• Course Title: Pediatric</td><td>• Code: PE 200</td></tr>
<tr><td colspan="3">• Number of teaching hours:
- Lectures: 4 hour /week
- Practical: 2 hours /week</td></tr>
<tr><td>5. course Aims</td><td colspan="2">The main activities of pediatric course delivered to medical students are:
a. To support acquisition of basic knowledge of normal and abnormal growth and development and its application from birth through adolescence.
b. To provide students with an appropriate background covering the common and important neonatal diseases and emergencies.
c. To enable the development and application of appropriate professional attitudes, communication and problem-solving skills.
d. To enable students to provide basic health care for individuals of the pediatric age group.</td></tr>
</table>

6. Course ILOs: *Upon completion of the course, the student should be able to:*	
E- Knowledge and Understanding	When the student finishes the course, he will be able to achieve the following objectives: A. 1-Describe normal growth and development in infancy, and recognize appropriate management for abnormalities affecting growth and development. A .2- Recognize and understanding of the impact of congenital and inherited diseases on children and their families. A .3-. Determine the nutritional requirements and the most common nutritional disorders affecting infancy and children and describe appropriate management for disorders.
F- Intellectual	B1. Interpret the most important symptoms and signs of diseases in pediatric patients in genetic disorders. B2 Relate appropriate management plans for nutritional diseases of pediatrics. B3. Schedule management regarding common clinical situations using appropriate problem-solving skills.
G- Professional and Practical Skills	**C.1**- Measure vital signs and assess anthropometric measures in neonates, infants, children and adolescence **C.2** Assess physical and mental development in neonates, infancy, children according to milestone **C.3** Assess the nutritional status of infants and children. **C.4** Assess different neonatal and pediatric emergencies and schedule appropriate management for them. **C.5** Construct a proper history for a patient in pediatric age group.
H- General and transferable Skills	**D.1** Communicate effectively with the children, adolescents and his family using appropriate communication skills and organize patient's data in informative manner. **D2** Demonstrate appropriate professional attitudes and behaviors in different practice situations

	D.3 Communicate with different websites for pediatrics.

4- Course content

Topic	Lectures hours/week	Practical and clinical hours/week	**ILOs**
Fetal Growth and nutrition and genetics	48	-	**A.1, a2 ,a3,B.1,B.2,,C.1,C.2**
Neonatology	24	48	**A1,a2. B.1,B.2,B.3 c1,c2,C.5**

5.Teaching and Learning Methods	1Lectures 2.Seminar presentation and journal club 3.Group Discussion 4.Grand Round 5.Pediatrics conferences 6.Attend Combined clinics and round.
6.Student Assessment	
D. Student Assessment	• Oral exam to assess how to manage neonatal and genetic disorders.
E. Assessment schedule	Assessment 1: written paper exam
F. Weighting of Assessment	• **Final- term written exam 30** • **Oral exam 45**
8. List of References	
E. Course Notes/handouts	1- Course notes and handouts by staff members of the department. 2- Practical notes by staff members of the department.
F. Essential books	Course notes by staff members of pediatric department
G. Recommended Books	Essential Nelson text book of pediatric
H. Periodicals, websites	WWW.pupmed.com

Course Coordinator: prof. Shereen Essam

Ass prof. Madiha Abdulla

Ass lect: shaimaa M yassin

Head of Department: prof. Mohd Abdel Maaboud

9- Matrix between course topics and course ILOs

Topics	ILOs			
	Knowledge & Understanding A	Intellectual skills B	Practical skills c	General skills d
Growth, Development, and Behavior:	**A.1, a2**	**b1-b2**	**c1,c2**	**d1**
Nutrition	**A.3**	**b1-b2,b3**	**C3**	**d1**
Human Genetics:	**A1,a2.**	**B.1,B.2,B.3**	**c1,c2,C.5**	-
Perinatal and Neonatal Medicine	**A1,a2.**	**B.1,B.2,B.3**	**c1,c2,C.5**	D2,d3

10- Matrix between teaching learning methods and ILOs

Methods of Teaching &	Intended Learning Outcomes (ILOs)

Learning	A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
	A	B	C	D
Lecture	A.1 TO A.3	B.1 TOB.3		D.1-to D3
Practical			C1 to C5	
Assignment	A.1TO A.3	B.1 TOB.3	C1 to C5	D.1 TO D.3

11- Matrix between Methods of student Assessment and program ILOs

Methods of Assessment	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
	A	B	C	D
Written exam	A.1TO A.3	B.1 TOB.3		
Oral Exam	A.1TO A.3	B.1 TOB.3		D.1 TO D.3

Blueprint of pediatric 1st part Master

	Topics	HOURS	Knowledge %	Intellectual %	% of topics	Mark	Actual mark
1	**Fetal Growth & development**	48	70	30		15	15
2	**Neonatology**	72	80	20		15	15
	Total	**120**	**100**	**100**		**30**	**30**

Public Health and preventive Medicine Course Specifications

Postgraduate (MSC) Programme for Paediatric Department

University: Minia University **Faculty:** Faculty of Medicine

Course specifications

Programme(s) on which the course is given: First part MSC in Paediatrics

Major or minor element of programmes: Statistics & research design, Nutrition, General epidemiology, Programs and Communicable & non-communicable diseases.

Department offering the programme: Department of pediatrics

Department offering the course: Department of Public Health and Community Medicine

Academic year/ Level: First part of MSC

A- Basic Information

Title: Master Degree in Public Health and Community Medicine

Code:

Credit Hours: -------- **Lecture: 2 hours/ week**

Tutorial: ---------- **Practical:** -------- **Total:**1 H/week

B- Professional Information

1 - Overall aims of course

a. Prepare a community-oriented physician capable of anticipating and responding to community health needs according to the policies, regulations, and guidelines of the MOHP.

b. To use precisely the research methodology in researches.

c. Inform public policy, disseminate health information, and increase awareness of public health concerns through disease surveillance, needs assessment, and program evaluation.

2- Intended learning outcomes of course (ILOs)

.Intended learning outcomes of course (ILOs): ***Upon completion of the course, the student should be able to:***	
A- Kowledge and Understanding	Al. Illustrate a knowledge base in, communicable and non-communicable diseases epidemiolog. A2 Describe epidemiology of COVID-19 virus and identify Strategies to Reduce Spread of Covid-19 A3 Describe methods of sampling strategies and sample size calculation A4 Describe normal distribution curve, measures of central tendency and measures of dispersion. A5 Recognize the basics of infection control measures, and their role in disease prevention A6 Describe nutritional needs to specific age groups e.g. "Children " A7 Understand main terms of Child health care programme
B-Intellectual Skills	B1 Anticipate and participate in investigation of an epidemic /outbreak as part of a health team and design an epidemiologic study to address a question of interest. B2 Apply epidemiologic skills in a public health setting, specifically in the formulation or application of public health programs or policies B3 Design a balanced diet according to the children B4 Interpret and summarize data
C-Professional and Practical Skills	C1 Demonstrate trends in health and disease including epidemiological causes of high prevalence of certain infections , causes of eradication , emerging or reemerging previous infections worldwide and in Egypt. C2 Use appropriate health promotion, disease prevention and control measures to identified priority communicable diseases and under specific situations
D-General and transferable Skills	D1Evaluate indicators of health and disease D2 Identify prevalent health problems in a community, using various epidemiological strategies D3 Collect and verify data from different sources D4 Organize and manage data, including graphic and tabular presentations D5 Analyze and interpret data D6 Anticipate and participate in investigation of an epidemic/outbreak as part of a health team D7 Apply appropriate health promotion, disease prevention, and control measures

	D8 Apply disease prevention and control measures to identified priority communicable and non-communicable diseases D9 Participate in conducting public health surveillance.

2- Course Contents

Clinical department	Topic	No. Of hours	
		Theoritical	Practical
Pediatrics	Statistics & research design	2	1
	Programs	2	NA
	Nutrition	2	1
	General epidemiology	2	NA
	Communicable ,Non-communicable diseases	2	1
	Demography	2	1

Teaching and learning methods

1- Lecture
2-Practical lessons
3-Seminars

5- Student assessment methods

5.1 Writing Exam
5.2 Oral Exam

Weighting of assessments

Oral examination:	60	%	(45 marks)
Writing examination	40	%	(30 marks)
Total	100	%	

6- List of references

6.1- Course notes: Department Books, and notes.
logbook

6.2- Essential books (text books)

MAXCY ROSENAU PUBLIC HEALTH AND PREVENTIVE MEDICINE TWELFITH EDITION, JOHN M. LAST, (EDITOR),APPLETON CENTURYCROFTS/NORWALK, CONNECTICUT.USA

6.3- Periodicals:

-Amercan Journal of Epidemiologyy
-International Journal of Epidemiology
-International Journal of Public Health
-Egyptian Journal of Community Medicine

6.4-Web Sites: **www.cdc.gov**
www.who.gov

7- Facilities required for teaching and learning

Public Health and Community Medicine skill laboratory equipped with skill tools.
Class rooms for theoretical lectures and tutorials.

- **Course Coordinators:**
  - ➢ **Coordinators:**
  1) **Lecturers:** Dr / Shaimma Mahmoud, Dr/ Chrestina Monir
     Assistant coordinator : Assis lecturer / Shaza fadel
- **Head of Department**:
  Professor Dr. Nashwa Nabil Kamal

Date of last update & approval by department council: 4 / 2023

جامعة/أكاديمية : المنيا

كلية / معهد: الطب

قسم: الصحة العامة والطب الوقائي

Post-Graduate Course Specifications of Community Medicine for **1st MSC** degree of pediatrics	مسمى المقرر
	كود المقرر

a. Matrix of Coverage of Course ILOs By Contents

(List of course topics) Contents	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
	A	B	C	D
General Epidemiology - Determinants of health and diseases - Prevention and control - Investigations of outbreak - Surveillance - Emerging diseases -Neglected tropical diseases	**A1,A5**	**B1**	C1,C2	D6 ,D7,D8,D9
Demography -Basics of demography and population pyramids -Population problem		**B2**		**D1**
Medical statistics -Sampling and normal distribution curves -Measures of central tendency and deviation -Data presentation and tests of significance -Introduction to research, research terminology -Study design , different types of stydy	**A3,A4**			**D5 ,D3,D4**
Epidemiology of communicable diseases: 3. Determiniats of health and diseses 4. Prevention and control 5. Emerging diseases 6. Neglected tropical diseases 7. Zonotic diseases 8. Arthropod born infections 9. Droplet infection 10. Blood born infection 11. sexual transmitted infections **Epidemiology of Non comunicable diseases:** 12. Diabetes and hypertention 13. Cardiovascilar diseases 14. Accidents 15. Cancer 16. Smoking	**A2,A5**	**B1**	**C1,C2**	**D2**
In Nutrition - *Introduction and nutrition:*	**A6**	**B3**		

Functions of food and nutrition in relation to human beings Definition of food, nutrition, calories Planning balance diet Measurement of energy - *Nutritional Elements* - *Nutrition throughout the life cycle* Nutritional requirements in infancy, preschool age, school age, adolescence, adult, pregnancy, lactation and geriatric nutrition. - *Nutritional assessment* - *Malnutrition diseases* - *Dietitics*				
Programmes Child health care programme	**A7**	B2		

B. Matrix of Coverage of Course ILOs by Methods of Teaching & Learning

Methods of Teaching & Learning	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
	A	B	C	D
Lecture	A1,A2,A3,A4,A5,A6,A7	B1,B2,B3,B4		
Practical			C1,C2	
Assignment, online quizes				D1 to D9

C. Matrix of Coverage of Course ILOs by Methods of Assessment

- **Course Coordinators:**
  - ➢ **Coordinators:**
  2) **Lecturers:** Dr / Shaimma Mahmoud, Dr/ Chrestina Monir
  Assistant coordinator : Assis lecturer / Shaza fadel
- **Head of Department**:
  Professor Dr. Nashwa Nabil Kamal

Methods of Assessment	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	**B. Intellectual Skills**	**C. Professional & Practical skills**	**D. General & Transferable Skills**
	A	**B**	**C**	**D**
Written exam	**A1 to A7**	**B2,B3,B4**		
Oral Exam			**C1,C2**	**D1 to D9**

Date of last update & approval by department council: 4/ 2023

Test blueprint for 1st part pediatric master examination

Topic	Hour	% of topic	Total No. of items	Written exam		Marks	
				Knowledge	Intellectual		
General epidemiology	2	16.7%	4	3	1	5	
Non communicable diseases	2	16.7%	4	2	2	5	
Programs	2	16.7%	4	3	1	5	
Communicable diseases	2	16.7%	4	3	1	5	
Medical Statistics	2	16.7%	5	3	2	5	
Nutrition	2	16.7%	4	2	2	5	
Total	12		25			30	

- **Course Coordinators:**
  - ➢ **Coordinators:**
  3) **Lecturers:** Dr / Shaimma Mahmoud, Dr/ Chrestina Monir
  Assistant coordinator : Assis lecturer / Shaza fadel
- **Head of Department**:
  Professor Dr. Nashwa Nabil Kamal

Date of program specifications 1st approval by <u>department council</u>: 13 /5/2013.

Date of <u>last update</u> & approval by <u>department council</u>: 6/ 3 / 2023

نموذج رقم (١٢)

Course Specifications of Pathology for 1st Part of Master Degree in Pediatrics

University: Minia

Faculty: Medicine

Department: Pathology

1.Course Information

• **Academic Year/level:** Postgraduate, master degree (1st part) of neurology.	**Course Title:** Pathology.	**Code: PE 200** •
• **Number of teaching hours:** - **Lectures:** Total of 12 hours; one hour/2week - **Practical/clinical:** no practical		
2. **Overall Aims of the course**	*By the end of the course the student must be able to:* 1. Acquire relevant basic information and correlate them with essential clinical data to reach a final diagnosis 2. Gain skills of basic & modern pathological laboratory techniques as well as principals of pathology. 3. Dealing with various biopsies and reporting pathological features and correlate such information with the relevant provided clinical data.	

3. **Intended learning outcomes of course (ILOs):**
Upon completion of the course, the student should be able to:

A- Knowledge and Understanding	A.1.Illustrate definition, types of acute and chronic inflammation as well as its pathological features and complications A.2.Determine pathological features of granuloma in relation to its morphological and etiological types A.3. Identify different forms of bacterial infections as bacteraemia, septicaemia, toxaemia and pyaemia. Mention their causes and effects on different organs A.4.Identify hemodynamic disorders as thrombosis, embolism, ischemia, infarction, haemorrhage, gangrene and edema and mention their causes and effects on different organs A5 Discuss the genetic and pediatric diseases and define its causes A.6. Define each term with examples as hypertrophy, hyperplasia, agenesis, hypoplasia, aplasia and atrophy. Distinguish between the disorders of differentiation of the cells as dysplasia and metaplasia. A.7. Define neoplasia, classification of tumors, describe grading and staging of malignant tumors. Define metastasis, describe mechanism of spread, and Outline the main routes A8: Define and discuss the main disease categories that may affect heart **(Endocarditis, rheumatic fever)** as well as the basic mechanisms underlying these diseases (etiology, pathogenesis and natural history). A9: Define and discuss the main disease categories that may affect respiratory system **(pneumonia, bronchopneumonia, lung abscess)** as well as the basic mechanisms underlying these diseases (etiology, pathogenesis and natural history). A10: Define and discuss the main disease categories that may affect kidney and urinary system **(GN, nephrotic, nephritic syndrome, congenital diseases**) as well as the basic mechanisms underlying these diseases (etiology, pathogenesis and natural history). A11: Define and discuss the main disease categories that may affect lymphatic and hemopoietic system (Reactive lymphadenitis, lymphomas) as well as the basic mechanisms underlying these diseases (etiology, pathogenesis and natural history)

B- Intellectual Skills	B.1.Predict the signs and symptoms of a disease based on the underlying gross & microscopic tissue changes . B2. Interpret a pathology report and integrate gross and microscopic findings with the underlying etiology B3. Utilize the obtained information to solve a problem in a case scenario to reach a provisional diagnosis
C- Professional and Practical Skills	C1. Demonstrate competency on dealing with and reporting gross features of different surgical specimens in view of
	adopted standards as well as quality & safety procedures. C2. Practice efficiently basic and modern laboratory techniques that include histochemical, immunohistochemical and other principal procedures such as tissue preservation, block sectioning, preparation of essential stains till handling of devices and microscopic examination, with emphasis on keeping the available resources. C3. Counsel expertise in the lab regarding the basics of essential techniques and issues related to maintain safety and available resources.
D- General and transferable Skills	D1. Demonstrate efficient communication & interpersonal skills in all its forms and in different situations that may involve senior staff, colleagues, students, lab technical staff, other health care professionals, and patients D.2. Use efficiently the information technology and select reliable sources of information to get essential information and updates regarding the different topics and techniques in surgical pathology. D.3. Develop skills of self-evaluation and identify personal learning needs to plan for self-development and continuous medical education D.4. Demonstrate the skills of effective time management.

4. **Course Contents**

Topic	**Lecture hours/week**	**Practical/Clinical hours/week**	**Total No. of hours hours/week**
GENERAL PATHOLOGY			
1. Inflammation, granuloma and Bacterial infection	1	-	1
2. Circulatory disturbances, amyloidosis	1	-	1
3. Genetic and pediatric diseases	1	-	1

4 Disturbances of cell growth and neoplasia	1	1	1
5 Diseases of heart: Endocarditis, rheumatic fever	2	-	2
6 Diseases of respiratory system: Pneumonia, bronchopneumonia, asthma	2	-	2
7 Diseases of kidney & urinary tract GN, nephrotic, nephritic syndrome, congenital diseases.	2	-	2
8. . Diseases of lymphatic and hematopiotic systems: Reactive lymphadenitis, lymphomas	1	-	1
Total	12	-	12
5. **Teaching and Learning Methods**	5.1. Lectures: Both face to face & on-line ones. 5.2. Practical lessons: Gross pathology and histopathology 5.3. Self-learning activities weekly regular & Tutorial 5.4. seminars, case presentation, training courses & workshops.		
6. **Teaching and Learning Methods for students with limited Capacity**	Not applicable		
7. **Student Assessment**			
A. Student Assessment Methods			
	1. Written exam to assess the acquired knowledge & understanding as well as intellectual skills and essential professional skills. **2. Oral exam** to assess the student intellectual and communication skills regarding basic knowledge and understanding of the course topics, and to help the teaching staff to evaluate the % of achievement of the intended learning outcomes of the course.		

B. Assessment Schedule (Timing of Each Method of Assessment)	• **Assessment 1: 1 written exam** by the end of course. • **Assessment 2: Oral exam,** after the written exam.
C. Weighting of Each Method of Assessment	**Type of Assessment** **Degree** • **Written** examination (10) • **Oral** examination. (15) • **Total** (25)
8. **List of References**	
A. Course Notes/handouts	1 -General pathology course notes prepared by the department staff and printed material of recorded lectures. **2-** Lectures' Handouts
B. Essential Books	1- Goldblum, John R., et al. Rosai and Ackerman's Surgical Pathology E-Book. Elsevier Health Sciences (2017).

Course Coordinator/s:

Assistant Prof. Dr. **Rehab Kamal Mohammed**

Assistant Prof. Dr. **Alzahraa Ibrahim Khalil**

Head of Department

Prof. Dr. Heba Mohamed Tawfik

Course Specification Pathology Master degree of Degree in Pediatrics (First part))	**مسمي المقرر**	**جامعة / أكاديمية : المنيا** **كلية / معهد : الطب البشري** **قسم : الباثولوجي**
PE 200	**كود المقرر**	

A. The Matrix of Coverage of Course IL by Contents

content	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	**B. Intellectual Skills**	**C. Professional & Practical skills**	**D. General & Transferable Skills**
	A	**B**	**C**	**D**
Acute inflammation	**A1**	**B3**	**C1**	**D1,2**
Chronic inflammation and granuloma	**A2**	**-**	**C1**	**-**
Bacterial infection	**A3**	**B3**	**C1**	**D3**
circulatory disturbance	**A4**	**-**	**C1**	**-**
Genetic and pediatric diseases	**A5**	**B3**	**C1**	**-**
Cellular adaptation	**A6**	**B3**	**C1,C2**	
Neoplasia	**A7**	**B3**	**C1,C2**	**-**
Endocarditis and Rh fever	**A8**	**-**	**C1,C2**	**D1**
Respiratory diseases	**A9**	**B3**	**C1,C2**	**D2**
Kidney and Urinary system	**A10**		**C3**	**D3,D4**
Lymphatic and hemopoietic system	**A11**	**B2,B3**	**C3**	**D1,D3**

B.Matrix of Coverage of Course ILOs by Methods of Teaching & Learning

Methods of Teaching & Learning	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
	A	B	C	D
Lecture	A1,2,3,4,5,6,7,8,9,10,11,	B1,2,3	-	D1,2,3,4
Practical	-	-	C1,2,3	D3,4
Clinical (Including grand rounds)	-	-	-	-
Presentation/seminar	A8,9,10,11	B1,2,3	C1,2,3	D1,2,3
Journal club	-	-	-	-
Thesis discussion	-	-	-	-
Training courses & workshops	A8,9,10,11	B1,2,3	C3	D3,4

C. Matrix of Coverage of Course ILOs by Methods of Assessment

Methods of Assessment	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
	A	B	C	D
Written exam	A1 to A11	B2,B3		
Oral Exam			C1,C2,c3	D1 to D4

Blueprint of pathology for 1st part of MSc of Pediatrics Department

Topic	Hours	Knowledge %	Intellectual %	% of topic	Marks	Actual Mark
Topic	Hours	Knowledge %	Intellectual %	% of topic	Marks	Actual Mark
1. General pathology	4	75	25	**33.3**	**2.5**	**3.5**
Inflammation, Granulomas, bacterial infections						
Circulatory disturbances, amyloidosis						
Genetic and pediatric diseases						
Disturbances of cell growth and neoplasia						
2.Diseases of heart: Endocarditis, rheumatic	2	75	25	**16.7**	**1.67**	**1.5**
3. Diseases of respiratory system: Pneumonia, bronchopneumonia, asthma	2	75	25	**16.7**	**1.67**	**1.5**
4. Diseases of kidney & urinary tract: GN, nephrotic, nephritic syndrome, congenital	2	70	30	**16.7**	**1.67**	**1.5**
5. Diseases of lymphatic and hematopiotic systems: Reactive lymphadenitis, lymphomas	1	75	25	**8.3**	**0.83**	**1**
6. Diseases of CNS: Infections , hydrocephalous, tumors	1	80	20	**8.3**	**0.83**	**1**
Total	**12**			**100%**	**10**	**10**

جامعة: المنيا
كلية : الطب البشري
قسم: الفسيولوجيا الطبية

Medical Physiology Course Specifications

For 1st Part Master (MSc) Degree in Pediatrics

University: Minia

Faculty: Medicine

Faculty offering the program: Faculty of Medicine.
Department offering the course: Medical Physiology Department.
Program(s), on which the course in given: MSc Degree in Pediatrics.
Major or minor element of program(s): Medical Physiology.
Academic year/level: 1st part MSc degree in Pediatrics.
Date of specification approval: 2022-2023

Basic Information

Title: Physiology course specifications for 1st part MSC degree of Pediatrics
Code: PE200 **Credit Hours:** Not applicable
Lectures: 1 hour / week
Tutorial/Practical: Not applicable

Professional information

1) OVERALL AIM OF COURSE:

The aim of the course is to provide the postgraduate students with knowledge about the physiological principles underlying pediatrics diseases that aid in interpretation of symptoms, investigations and management.

INTENDED LEARNING OUTCOMES OF COURSE (ILOs)

A. Knowledge and Understanding:

By the end of the course, the student should be able to:

A1. Physiology of Blood:

1.1. Identify General constituents of blood and their functions.
1.2. Explain RBCs, Erythropoiesis and its clinical disorders.
1.3. Describe blood groups and principles of blood transfusion.
1.4. Describe WBCs and Immune response.
1.5. Discuss the mechanisms of Haemostasis and its clinical disorders.

A2. Physiology of Cardiovascular System (CVS):

2.1. Discuss Heart rate and its regulation.

2.2. Describe normal ECG.
2.3. Describe ABP and its regulation.
2.4. Explain COP and factors affecting it**.**
2.5. Recognize effects of Hemorrhage and body compensatory mechanisms.

A3. Physiology of Central Nervous System and autonomic nervous system:

3.1. Identify Sensory division, types, pathways and clinical disorders.
3.2. Discuss Motor division, types, pathways and clinical disorders.
3.3. Enumerate distribution and functions of sympathetic NS.
3.4. Enumerate distribution and functions of sympathetic NS.
3.5. Explain chemical transmitters and receptors.

A4. Physiological basis of Metabolism:

4.1. Describe regulation of body temperature and mechanism of fever & disorders.

A5. Physiological basis of Endocrinal System:

5.1. Explain Growth hormone: functions, control of secretion, defects of secretion.
5.2. Discuss Thyroid gland: functions, control of secretion, defects of secretion.
5.3. Enumerate Glucocorticoids: functions, control of secretion, defects of secretion.
5.4. Describe Insulin: functions, control of secretion and regulation of blood glucose.
5.5. Discuss in details Calcium homeostasis.

A6. Physiology of Respiratory System:

6.1. Explain mechanism of respiration and causes of respiratory distress.
6.2. Describe central and peripheral regulation of respiration.
6.3. Discuss in details hypoxia and cyanosis.

A7. Physiology of Digestive System:

7.1. Explain mechanisms of upper GIT motility (mastication, deglutition, gastric motility and vomiting).
7.2. List the functions, types and control of salivary secretion.
7.3. Discuss pancreatic secretion, liver, bile and jaundice.
7.4. Describe intestinal motility and secretion.
7.5. Enumerate types and functions of gastrointestinal hormones.

A8. Physiology of Urinary system:

8.1. Discuss in details mechanisms of renal tubular transport.
8.2. Describe acid base balance and its clinical disorders.
8.3. Explain water and electrolyte balance common disorders.
8.4. Recognise renal function tests.

B. Intellectual Skills:

By the end of the course, the student should be able to:

B1. Develop the skills for demonstrating different functions of the body systems and diagnose deviation from normality as detected disease state.
B2. Assess the problems associated with different factors, which affect the normal function of different body systems.

C. Practical Skills:

Practical hours: -

D. General and Transferable Skills:

By the end of the course, the student should be able to:

D1. Adopt the principles of lifelong learning.

D2. Prepare and present clearly and effectively a scientific topic in a tutorial, a staff meeting or the yearly scientific day.

D3. Work efficiently within a team, honor and respect his colleagues.

Curriculum structure & contents:

Topic:	**No. of Lectures**	**Total no. of hours**
1. Physiology of Blood: - General constituents of blood and their functions. - RBCs, Erythropoiesis and its clinical disorders. - Blood groups and principles of blood transfusion. - WBCs and Immune response. - Mechanisms of Haemostasis and its clinical disorders.	**3**	**3**
2. Physiology of Cardiovascular System (CVS): - Heart rate and its regulation. - Normal ECG. - ABP and its regulation. - COP and factors affecting it. - Recognize Effects of haemorrhage, and body compensatory mechanisms.	**3**	**3**
3. Physiology of Central Nervous System and autonomic NS: - Sensory division, types, pathways and clinical disorders. - Motor division, types, pathways and clinical disorders. - Distribution and functions of sympathetic NS. - Distribution and functions of sympathetic NS. - Chemical transmitters and receptors.	**4**	**4**
4. Physiological basis of Metabolism: - Regulation of body temperature and mechanism of fever & disorders.	**1**	**1**
5. Physiological basis of Endocrinal System: - Growth hormone: functions, control of secretion, defects of secretion. - Thyroid gland: functions, control of secretion, defects of secretion. - Glucocorticoids: functions, control of secretion, defects of secretion. - Insulin: functions, control of secretion and regulation of blood glucose. - Calcium homeostasis.	**4**	**4**
6. Physiology of Respiratory System: - Mechanism of respiration and causes of respiratory distress. - Central and peripheral regulation of respiration. - Hypoxia and cyanosis.	**3**	**3**
7. Physiology of Digestive System: - Mechanisms of upper GIT motility (mastication, deglutition, gastric motility and vomiting). - Functions, types and control of salivary secretion.		

- Pancreatic secretion, liver, bile and jaundice. - Intestinal motility and secretion. - Types and functions of gastrointestinal hormones. **8. Physiology of Urinary System:** - Mechanisms of renal tubular transport. - Acid base balance and its clinical disorders. - Water and electrolyte balance common disorders. - Renal function tests	**3** **3**	**3** **3**
Total	**24**	**24**

TEACHING AND LEARNING METHODS:

1. Lectures (1hr/wk.) throughout the academic year interchangeable with recorded lectures.
2. Self-learning activities such as use of internet and multimedia.

STUDENT ASSESSMENT METHODS:

1. **Written exam** to assess the student's knowledge in the form of short essay questions and /or MCQs.
2. **Oral exam** to assess student's knowledge, intellectual and general skills as well as assessing the verbal communication abilities.
3. **Log book.**

Assessment Schedule:

- **Assessment 1:** Final written exam.
- **Assessment 2:** Final oral exam.

Weighting of assessment:

- **Final written exam** **10** marks (40%)
- **Final oral exam** **15** marks (60%)
- **Total** **25** marks (100%)

LIST OF REFERENCES:

1. **Department books and notes.**
   Prepared by Medical Physiology Department staff members, Faculty of Medicine, Minia University.
2. **Essential books (Text Books):**
   - Ganong review of medical physiology.
   - Guyton text book of medical physiology.
3. **Periodicals, Web sites… etc.**

FACILITIES REQUIRED FOR TEACHING AND LEARNING:

1. Classrooms with data show for lectures.
2. Computers and internet facilities.

Date of last update & approval by Department council: 2/2023

Course Coordinator, **Head of Department,**

Prof.Dr. Adel Hussien Saad **Prof.Dr. Merhan M. Ragy**

Professor of Medical Physiology Faculty Department of Medicine, Minia University University

Prof. & Head of Medical Physiology Faculty of Medicine, Minia

جامعة/أكاديمية : ....المنيا..............

كلية / معهد: ....الطب البشري ....

قسم: ....الفسيولوجيا الطبية...................

Physiology course specifications for 1st Part MSc degree in Pediatrics	مسمى المقرر
PE200	كود المقرر

A. Matrix of Coverage of Course ILOs by Contents

Contents	**Intended Learning Outcomes ILOs**																																					
	A. Knowledge & Understanding																																	**B. Intellectual skills**		**D. General & Transferable Skills**		
	A 1.1	**A 1.2**	**A 1.3**	**A 1.4**	**A 1.5**	**A 2.1**	**A 2.2**	**A 2.3**	**A 2.4**	**A 2.5**	**A 3.1**	**A 3.2**	**A 3.3**	**A 3.4**	**A 3.5**	**A 4.1**	**A 5.1**	**A 5.2**	**A 5.3**	**A 5.4**	**A 5.5**	**A 6.1**	**A 6.2**	**A 6.3**	**A 7.1**	**A 7.2**	**A 7.3**	**A 7.4**	**A 7.5**	**A 8.1**	**A 8.2**	**A 8.3**	**A 8.4**	**B1**	**B2**	**D 1**	**D 2**	**D 3**
1. **Physiology of Blood**	X	X	X	X	X																													X	X	X	X	X
2. **Physiology of**						X	X	X	X	X																								X	X	X	X	X

Cardiovascular System (CVS)																																						
3. Physiology of Central and autonomic NS											X	X	X	X	X																			X	X	X	X	X
4. Physiological basis of Metabolism																X																		X	X	X	X	X
5. Physiological basis of Endocrinal System																	X	X	X	X	X													X	X	X	X	X
6. Physiology of Respiratory System																						X	X	X										X	X	X	X	X
7. Physiology of Digestive System																									X	X	X	X	X					X	X	X	X	X
8. Physiology of Urinary System																														X	X	X	X	X	X	X	X	X

B. Matrix of Coverage of Course ILOs by Methods of Teaching & Learning

Methods of Teaching & Learning	**Intended Learning Outcomes (ILOs)**			
	A. Knowledge & Understanding	**B. Intellectual Skills**	**C. Professional & Practical skills**	**D. General & Transferable Skills**
	A	**B**	**C**	**D**
Lectures	X	X	-	X
Self-learning activities	X	X	-	

C. Matrix of Coverage of Course ILOs by Methods of Assessment

Methods of Assessment	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
	A	B	C	D
Written exam	X	X	-	-
Oral Exam	X	X	-	X
Log Book	X	X	-	X

Course Coordinator,

Dr. Adel Hussien Saad

Head of Department Dr.
Merhan M. Ragy

Professor of Medical Physiology
Professor & Head of Medical Physiology Department
Faculty of Medicine, Minia University
Faculty of Medicine, Minia University

Blueprint of Postgraduate Physiology Course for Master's degree (1st part) of Pediatrics Department (Code: PE 200) (10 marks)

Topic	Hours	Knowledge %	Intellectual%	Weight %	ILOs	Modifid Marks	Actual marks
1. **Physiology of Blood:** General constituents of blood and their functions. RBCs, Erythropoiesis and its clinical disorders. Blood groups and principles of blood transfusion. WBCs and Immune response. Mechanisms of Haemostasis and its clinical disorders.	3	75	25	12.5	A1	1.25	1.25
2. Physiology of Cardiovascular System: Heart rate and its regulation. Normal ECG. ABP and its regulation. COP and factors affecting it. Recognize Effects of haemorrhage, and body compensatory mechanisms.	3	75	25	12.5	A2	1.25	1.25
3. Physiology of Central and autonomic nervous system: Sensory division, types, pathways and clinical disorders. Motor division, types, pathways and clinical disorders. Distribution and functions of sympathetic NS. Distribution and functions of sympathetic NS. Chemical transmitters and receptors.	4	75	25	16.6	A3	1.67	1.5
4. Physiological basis of Metabolism: Regulation of body temperature and mechanism of fever & disorders.	1	75	25	4.16	A4	0.41	0.5
5. Physiological basis of Endocrinal System: Growth hormone: Thyroid **.**functions, control of secretion, defects of secretion **.**gland: functions, control of secretion, defects of secretion Glucocorticoids: functions, control of secretion, defects of Insulin: functions, control of secretion and regulation of **.**secretion Calcium homeostasis**..**blood glucose	4	75	25	16.6	A5	1.67	1.5
6. Physiology of Respiratory System: Mechanism of respiration Central and peripheral .and causes of respiratory distress Hypoxia and cyanosis. .regulation of respiration	3	75	25	12.5	A6	1.25	1.25
7. Physiology of Digestive System: Mechanisms of upper GIT motility (mastication, deglutition, gastric motility and vomiting). Functions, types and control of salivary secretion. Pancreatic secretion, liver, bile and jaundice. Intestinal motility and secretion. Types and functions of gastrointestinal hormones.	3	75	25	12.5	A7	1.25	1.25
8. Physiology of Urinary system: Mechanisms of renal tubular Water and .transport. Acid base balance and its clinical disorders Renal function tests..electrolyte balance common disorders	3	75	25	12.5	A8	1.25	1.25
Total	24			100%	-	10	

Course Specifications of Human Anatomy and Embryology as a part of the postgraduate (MSC) program in PEDIATRICS

University: Minia

Faculty: Medicine

Department: Human anatomy and Embryology

1. Course Information		
• **Academic Year/level:** first part	• **Course Title:** Course Specifications of Anatomy and Embrylogy in Master degree in **PEDIATRICS**	
• **Number of teaching hours:** - **Lectures:** Total of 22 hours - **Practical/clinical**: Total of 8 hours		
2. Overall Aims of the course	*By the end of the course the student must be able to:* to have the professional knowledge anatomy, growth and embryology of internal body systems.	
3. Intended learning outcomes of course (ILOs): ***Upon completion of the course, the student should be able to:***		
A- Knowledge and Understanding	A1. Mention the normal structure and function of the body systems on the macro levels. A2. State early embryo development & normal growth and development of the different body systems. A3. List the recent advances in the abnormal structure, function, growth and development of, GIT, cardiovascular, respiratory and urinary system. A4. Define the anatomical basis of surface anatomy and radiologic anatomy	
B- Intellectual Skills	B1. Link between knowledge for Professional problems solving. B2. Conduct research study and / or write a scientific study on a research problem. B3. Correlate diseases based on anatomical disruptions. B4. Establish goals to improve performance in the field of pediatrics..	

C- Professional and Practical Skills	C1. Practice the basic and modern medical skills in the area of pediatrics C2. Describe diseases and anomalies based on anatomical data.
D- General and transferable Skills	d1. Communicate effectively by all types of effective .communication d2. Use information technology to serve the development of .professional practice d3. Assess the candidate himself and identify personal .learning needs d4. Use different sources to obtain information and knowledge d5. Assess the performance of others

4. Course Contents

Topic	Lecture hours/week	Practical/Clinical hours/week	Total No. of hours hours/week
Karyotyping.	2		2
Post natal growth.	3		3
Chromosomal abnormalities.	3		3
Gene related syndromes	3		2
Gametogenesis,fertilization, implantation.fetal membrane	2	1	3
Normal and abnormal development of the digestive tract, liver and pancreas.	2	2	4
Cardiovascular anatomy and development.	2	1	3
Urinary system anatomy and development.	1	1	3
Anatomy and development of face, vertebral column, limbs	2	1	3
Anatomy and development of central nervous system.	2	2	4
Total	22	8	30

5. Teaching and Learning Methods	1 - Lectures. 2 - Practical lessons. 3- Assignments for the students to empower and assess the general and transferable skills
6. Teaching and Learning Methods for students with limited Capacity	

7. Student Assessment	
A. Student Assessment Methods	**1- written exam: paper based exams** **1 paper for 1st part exam** Short assay: to assess Knowledge, understanding Problem solving: asses intellectual skills Multiple choice: assess Knowledge, understanding and intellectual skills Periodic quizzes: assess Knowledge, understanding and intellectual skills **2- Practical exams (**skill lab exams): **to assess practical skills as well as intellectual skills.** **3- Oral exam: to assess understanding, intellectual skills and transferrable**.
B. Assessment Schedule (Timing of Each Method of Assessment)	Assessment 1 ... Final practical exam (skill lab exams) Week: 20-22 Assessment 2…. Final written exam (paper based exam). Week : 22-24 Assessment 3…..Final oral exam Week: 22-24
C. Weighting of Each Method of Assessment	Final-term Final written exam (paper based exam) Examination: 30 Oral Examination: 40 Practical Examination; skill lab exams: 5 _____
8. List of References: - **Standring,S, Ellis, H., Healy, J.C., Johnson, D., and Williams, J.C., 2016. Gray's anatomy. 50th edition.** - **Junqueira, L.C. and Carneiro, J., 2015. Basic histology. 10th edition.** - **Moore K.L., and Agur A.M.R., 2016. Essential clinical anatomy. 14th edition.**	
A. Course Notes/handouts	Lecture notes prepared by staff members in the department.
B. Essential Books	Gray's Anatomy .
C. Recommended Text Books	A colored Atlas of Human anatomy and Embryology.
D. Periodicals, websites	American J. of Anatomy Cochrane Library,Medline & Popline

Course Coordinator/s:

Dr. Medhat Atta Salah

Head of Department:

Prof. Dr. Fatma Alzahraa Fouad Abdel- Baky

Date of last update & approval by department Council: 4/2023

نموذج رقم (١١)

جامعة/أكاديمية : المنيا
كلية / معهد: الطب
قسم: التشريح

مسمى المقرر	التشريح
كود المقرر	PE200

A. Matrix of Coverage of Course ILOs By Contents

Contents (List of course topics)	Week No.	Intended Learning Outcomes (ILOs)			
		A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
		A	B	C	D
Karyotyping.	1	1,2,3,4	1,2	1	1,3,5
Post-natal growth.	2	1,2,3,4	1,3	2	1,3
Chromosomal abnormalities.	3	1,2,4	3,4	1	1,3,5
Gene related syndromes	4	1,2,3,4	2,3	2	2,4
Gametogenesis, fertilization, implantation. Fetal membrane	5	1,3,4	2,3	1,2	3,4
Normal and abnormal development of the digestive tract, liver and pancreas.	6	1,3,4	2	1,2	4,5

Cardiovascular anatomy and development.	**7**	**1,2,3,4**	**1,2**	**1**	**1,2,5**
Urinary system anatomy and development.	**8**	**1,2,3,4**	**2,3**	**2**	**2,4**
Anatomy and development of face, vertebral column, limbs	**9**	**1,2,4**	**1**	**1,2**	**4,5**
Anatomy and development of central nervous system.	**10**	**1,2,3,4**	**2,4**	**1**	**1,2,5**

Matrix of Coverage of Course ILOs by Methods of Teaching & Learning

Methods of Teaching & Learning	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
	A	B	C	D
Lecture	1,2,3,4	1,2		
Practical {skill lab,: instructor guided}			1,2	
Presentation/seminar	1,4			4,5
Group discussion	3,4		1	1,3,5

B -Matrix of Coverage of Course ILOs by Methods of Assessment

Methods of Assessment	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
	A	B	C	D
Written exam(paper based)	1,3,4	1,3	_	_
Practical (skill lab) exam	_	_	2	_
Oral Exam	12,3,4	1,2,4		4,5

Blue print of Human Anatomy and Embryology Department

for master degree 1st part examination paper of pediatrics

	Topic	Hours	Knowledge%	Intellectual%	% topic	No. of items per topic	Knowledge mark	Intellectual Mark	Mark	Actual mark
1	Karyotyping	2	67%	33%	9.1%		1.7	1	2.73	3
2	Post-natal growth.	3	67%	33%	13%		2.6	1.3	3.9	4
3	Chromosomal abnormalities.	3	60%	40%	13%		2.3	1.56	3.9	4
4	Gene related syndromes	3	67%	33%	13%		2.6	1.3	3.9	4
5	Gametogenesis,fertilization, implantation.fetal membrane	2	60%	40%	9.1%		1.6	1.13	2.73	2.7
6	Normal and abnormal development of the digestive tract, liver and pancreas.	2	75%	25%	9.1%		2.01	.72	2.73	2.7
7	Cardiovascular anatomy and development.	2	67%	33%	9.1%		1.7	1	2.73	2.7
8	Urinary system anatomy and development.	1	67%	33%	4.5%		.9	.45	1.35	1.5
9	Anatomy and development of	2	75%	25%	9.1%		2.01	.72	2.73	2.7

	face, vertebral column, limbs									
10	Anatomy and development of central nervous system.	2	67%	33%	9.1%		1.7	1	2.73	2.7
	Total	22			100%		20.16	9.84		30

Course Specifications of Clinical pathology ad chemistry for First part Master degree of pediatric

2022-2023

University: Minia

Faculty: Medicine

Department: Clinical pathology and chemistry department

1. Course Information		
• **Academic Year/level: first part internal medicine MSc**	• **Course Title: Clinical pathology for pediatric Master degree**	• **Code: PE200**
• ***Number of teaching hours:*** - ***Total of 48 hours***		
2. Overall Aims of the course	***By the end of the course the student must be able to:*** 1-Gain basic and necessary knowledge for proper diagnosis of different hematological disease. 2- Enable candidate to reach to proper diagnosis by interpreting of electrolyte, lipid ,renal and carbohydrate results. 3-Enable candidate to know introduction and general topics in microbiology.	
3. Intended learning outcomes of course (ILOs): ***Upon completion of the course, the student should be able to:***		
A- Knowledge and Understanding	A.1. Define terms screening of hemostasis. A.2. Recognize basic concepts of different hematological disease.	

	A.3. Identify the role of importance of microbiology disease. A.4. Identifies types of different type of blood component. A.5. Explain the importance of CHO, lipid, electrolyte and kidney function tests .
B- Intellectual Skills	B.1. Relate appropriate laboratory tests for hemostasis screening. B.2. Differentiate between different types of anemia and hematological malignancies. B.3. Interpret different patterns of microbiological disease . B.4. Compare between various types of hypersensitivity reaction I blood transfusion. B.5. Interpret various analysis reports of CHO, lipid , electrolyte and kidney.
C- Professional and Practical Skills	C.1. Label importance of assay of different microbiological assay test of blood transfusion. C.2. Assess the appropriate laboratory tests for hematological disease, diabetic pattern.
D- General and transferable Skills	D.1. Practice the life-long habits of reading, literature-searches, and consultation with colleagues, attendance of scientific meetings, and the presentation of scientific work as part of continuing professional education (CPD). D.2. Use communication skills as the trainee must gain experience, under supervision, in planning departmental policies and develop and implement the leadership skills. D.3. Discuss the use of e-technology in continuous professional improvement

4. Course Contents		
Topic	**No. of hour lecture**	**No. of hour practical (cases)**
Anemia (etiology and classification)(clinical hematology)	**6**	**2**
Screening tests of hemostasis)(clinical hematology)	**2**	**2**
Malignancy(myeloid))(clinical hematology)	**2**	**2**
Malignancy (Lymphoid))(clinical hematology)	**2**	**2**
Blood bank)(clinical hematology)	**2**	**1**
Carbohydrate (CHO))(clinical chemistry)	**2**	**2**
lipid (clinical chemistry)	**2**	**2**
electrolyte (clinical chemistry)	**2**	**2**
kidney (clinical chemistry)	**2**	**2**
Malignancy (clinical hematology)	**2**	**1**
Introduction of microbiology)**(clinical microbiology)**	**2**	**1**
General topics in microbiology)**(clinical microbiology)**	**2**	**1**
Total	**28**	**20**
5.Teaching and Learning Methods	1- Lectures. 2- Online lectures and seminars	
6. Student Assessment		
A. Student Assessment Methods		

	5.1- Written exams: to assess the student's comprehension and understanding of the class work. **5.2- Oral Exams:** to assess student's intellectual and communication abilities regarding basic knowledge and understanding of the course topics.
B. Assessment Schedule (Timing of Each Method of Assessment)	**Assessment 1: Final written exam** **Assessment 2: Oral exam**
C. Weighting of Each Method of Assessment	**Final Written Examination 10** **Oral Examination 15** **Total 25**
7. List of References	
A. Course Notes/handouts	**Staff members print out of lectures and/or CD copies.**
B. Essential Books	➢ **Tietz Fundamentals of clinical chemistry** ➢ **Williams of hematology** ➢ **Basic and clinical immunology** ➢ **Basic and clinical immunology**
C. Periodicals, websites	➢ http://www.medscape.com ➢ http://www.pubmed.com

Course Coordinator **Head of Department**

Dr . /Hend M Moness **Prof. Dr. /Ashraf M Osman**

نموذج رقم (١١أ)

Post-Graduate Course Specifications **Clinical pathology and chemistry for First part Master degree of pediatric**	مسمى المقرر
PE 200	كود المقرر

جامعة/أكاديمية : المنيا
كلية / معهد: الطب
قسم: الباثولوجيا الأكيلينكية

A. Matrix of Coverage of Course ILOs By Contents

Contents **(List of course topics)**	**Week No.**	**Intended Learning Outcomes (ILOs)**			
		A. Knowledge & Understanding	**B. Intellectual Skills**	**C. Professional & Practical skills**	**D. General & Transferable Skills**
		A	**B**	**C**	**D**
Anemia (etiology and classification)		**A2**	**B2**	**C2**	**D1,2,3**
Screening tests of hemostasis		**A1**	**B1**	**C2**	**D1,2,3**
Malignancy (myeloid)		**A2**	**B2**	**C2**	**D1,2,3**
Lymphadenopathy (lymphoid)		**A2**	**B2**	**C2**	**D1,2,3**
Blood bank		**A3**	**B4**	**C**	**D1,2,3**
CHO		**A5**	**B5**	**C2**	**D1,2,3**
Lipid		**A5**	**B5**	**C2**	**D1,2,3**

electrolyte		**A5**	**B5**	**C2**	**D1,2,3**
kidney		**A5**	**B5**	**C2**	**D1,2,3**
malignancy		**A2**	**B2**	**C2**	**D1,2,3**
Introduction of microbiology		**A3**	**B3**	**C1**	**D1,2,3**
General topics in microbiology		**A3**	**B3**	**C1**	**D1,2,3**

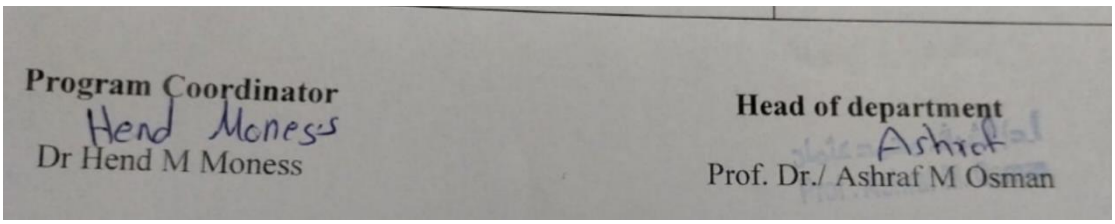
Matrix of Coverage of Course ILOs by Methods of Teaching & Learning

Methods of Teaching & Learning	**Intended Learning Outcomes (ILOs)**			
	A. Knowledge & Understanding	**B. Intellectual Skills**	**C. Professional & Practical skills**	**D. General & Transferable Skills**
Lecture	**A1-5**	**B1-5**	**C1, C2**	**D1,2,3,**
Assignment	**A1-5**	**B1-5**	**C1, C2**	**D1,2,3**

Matrix of Coverage of Course ILOs by Methods of Assessment

Methods of Assessment	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
Written exam	A1-5	B1-5	C1, 2	D1,2,3
Oral Exam	A1-5	B1-5		

Course Coordinator **Head of Department**



Dr Hend M Moness **Prof. Dr/ Ashraf M Osman**

Last data of approval 7/3/2023

Blueprint of Clinical pathology and chemistry Exam paper for 1st part of pediatric (PE200)
10 marks

Topic		Hours	Knowledge %	Intellectual%	% of topic	N of items Per topic	Knowledge		Intellectual		Marks	Actual Mark
							N of items	mark	N of items	Mark		
1	Clinical hematology	16	70	30	**57.1**	8	7	**5**	1	0.7	**5.7**	**5**
2	Clinical chemistry	8	75	25	**28.5**	4	3	**2**	1	0.85	**2.85**	**3.0**
3	Clinical microbiology	4	75	25	**14.2**	2	1	**1**	1	1	**42**	**2**
	Total	28			**100%**							**10**

Pharmacology course specification for master degree in Pediatrics (First part)

University: *Minia*
Faculty: *Medicine*
Department: Pharmacology
Last date of approval 1/2023

1. Basic Information		
• **Academic Year/level:** First Part of Master Degree	• **Course Title**: First Part of Master Degree in **Pediatrics**	• **Code**:
• **Number of teaching hours:**	**Lectures: 24 hours; 1 hour/week** **Practical: 0**	
2. Overall Aims of the course	***By the end of the course the student must be able to:*** 1. Provide the postgraduate student with the medical Knowledge and skills essential for the practice of specialty and necessary to gain. 2- Understand all molecular basics and diseases. 3-Detect different molecular techniques and their advanced applications. 4-Better understand and use the research tools including internet and different laboratory equipment.	

3. Intended learning outcomes of course (ILOs): ***Upon completion of the***

course, the student should be able to:	
A. Knowledge and Understanding	A1. Mention the basic pharmacological knowledge. A.2 Define general pharmacokinetics as well specific properties of different groups of drugs putting into consideration age, sex and genetic related variations that affect the response to drugs (pharmacogenetics). A.3 Recall general pharmacodynamics as well specific properties of different groups of drugs that include the drug's mechanism of action and pharmacological effects. A.4 List pharmacotherapeutics which reflects the role of drugs in prevention, diagnosis and treatment of diseases as well as prevention of conception. It includes also pathopharmacology of diseases and drugs, indications, contraindications, adverse reactions and drug interactions especially in high risk groups (extremes of age, pregnancy and lactation, liver kidney and cardiac diseases). Pharmaco-economics is included in this category. A.5 Memorize Systemic pharmacology which includes drugs acting on different body systems such as cardiovascular, autonomic, respiratory, gastrointestinal, endocrine, blood ,……. .A.6 Define the basic, and ethics of scientific research. A.7. List the principles of quality in professional practice in the field of therapeutics and applied pharmacology
B- Intellectual Skills	B.1 select and use drugs safely and efficiently knowing their limits and the potential risks B.2 Solve medical problems arising from use of drugs and the development of resistance or tolerand encouraging them to search for alternative approaches after revising the diagnosis. B.3 Participate in clinical or laboratory risk manageme activities as a part of clinical governance. B.4 Present and defend his/her data in front of a panel experts. B.5 Formulate management plans and alternative decis different situations in the field of Pharmacology. B.6.Assess risk in research and experimentation using drugs and/or chemicals. B.7. Plan for the development of performance in the fi therapeutics and pharmacological researches.

	B.8.Assess different clinical problems and formulate pharmacological researches to solve such problems. B.9. Combine knowledge for Professional problems' s
C- Professional and Practical Skills	C.1 Evaluate the need of his/her career to join the major advances in drug information C.2 Perform the basic lab skills essential to the course. C.3 Develop plans for performing experiments related to pharmacology. C.4 Use information technology in some of the pharmacology related situations. C.5 Band better understanding of the normal structure and function.

D- General and transferable Skills	D1- Perform practice-based improvement activities using a systemic methodology (share in audits and risk management activities and use logbooks). D3- Collect and verify data from different sources. D4- Analyze and interpret data. D5-Appraise evidence from scientific studies. D6- Use information technology to manage information, access on line medical researches to support his/her own education.

4- Course Contents

Topic	**Lecture hours/week**	**Practical hours/week**	**Total No. of hours hours/week**
Pharmacokinetic variables	3	-	3
Drug interactions and adverse drug reactions	2	-	2
Autonomic Pharmacology	3	-	3
Pharmacology of Heart failure and Diuretics	1	-	1
Pharmacology of GIT	2	-	2
Corticosteroids	1	-	1

Drugs used in diabetes	2	-	2
Nonsteroidal anti-inflammatory drugs and treatment of gout	2	-	2
Antiepileptic drugs	1	-	1
Chemotherapy	6	-	6
Treatment of respiratory tract	1	1	

Total	24	24
5-Teaching and Learning Methods	1-Lectures & discussions. 2-Assignments 3-Attending and participating in scientific conferences and workshops to acquire the general and transferable skills needed	
6-Teaching and Learning Methods for students with limited Capacity	Additional lectures, adjusting time and place of lectures according to their schedule and capacity	
7- Student Assessment		
A-Student Assessment Methods	**1- Written exam** to assess the capability of the student for assimilation and application of the knowledge included in the course. **2-Oral exam** to assess the student intellectual and communication skills regarding basic	

	knowledge and understanding of the course topics, and to help the teaching staff to evaluate the % of achievement of the intended learning outcomes of the course **3- Practical exam** to assess the student's ability to identify different methods of identification of different drug actions and interactions.	
B-Assessment Schedule (Timing of Each Method of Assessment)	***Assessment 1: one written exam*** *by the end of the course* **Assessment 2:** ***Oral exam,*** *after the written exam* **Assessment 3:** ***Practical exam*** **Formative only assessment:** log book.	

8-Weighting of Each Method of Assessment	**Written examination: 10 marks 40%** **Oral and practical examination: 15 marks 60%** **Total: 25 marks 100%**
9- List of References	
A. Course Notes/handouts	Lecture notes prepared by the staff members in the department.
B. Essential Books	- Principles of pharmacology the pathophysiologic basis of drug therapy
C. Recommended Text Books	- Goodman & Gilman - Katzung
D. Periodicals, websites	Pharmacological Reviews - Journal of Pharmacology and Experimental therapeutics - British journal of pharmacology - European journal of pharmacology - Pharmacological research **http://www.ncbi.nlm.nih.gov/pubmed/**

Course Coordinator/s:

Ass. Prof. Dr. Seham Abdelwakeel

Head of Department:

Professor Dr. Mohamed Abdellah Ibrahim

Date of last update & approval by department Council:

4 / 2023

جامعة / أكاديمية : المنيا كلية / معهد : الطب قسم : الفارماكولوجي	مسمي المقرر	جزء اول ماجستير الاطفال
	كود المقرر	

A. Matrix of Coverage of Course ILOs By Contents

B. Matrix of Coverage of Course ILOs By Contents

Contents (List of course topics)	Week No.	Intended Learning Outcomes (ILOs)			
		A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
		A	B	C	D
Pharmacokinetic variables		X	X	X	X
Drug interactions and adverse drug reactions		X	X	X	X
Autonomic Pharmacology		X	X	X	X
Pharmacology of Heart failure and Diuretics		X	X	X	X
Pharmacology of GIT		X	X	X	X
Corticosteroids		X	X	X	X
Drugs used in diabetes		X	X	X	X
Nonsteroidal anti-inflammatory drugs and treatment of gout		X	X	X	X
Antiepileptic drugs		X	X	X	X
Chemotherapy		X	X	X	X
Treatment of respiratory tract		X	X	X	X

B. Matrix of Coverage of Course ILOs by Methods of Teaching & Learning

Methods of Teaching and learning	**Intended Learning Outcomes (ILOs)**			
	A. Knowledge & Understanding	**B. Intellectual Skills**	**C. Professional & Practical skills**	**D. General & Transferable Skills**
	A	**B**	**C**	**D**
Lecture	x	x		
Practical			X	
Presentation/seminar	x	x		x
Journal club	X	x		x
Thesis discussion	X	x		x
Training courses & workshops			X	

C. Matrix of Coverage of Course ILOs by Methods of Assessment

Methods of Assessment	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	**B. Intellectual Skills**	**C. Professional & Practical skills**	**D. General & Transferable Skills**
	A	**B**	**C**	**D**
Written exam	x	x		
Oral Exam	x	x		
Assignment	x	x		

Blueprint of Pediatrics MSC (Pharmacology Examination Paper)

10 Mark

	Topics	HOURS	Knowledge %	Intellectual %	% of topics	Mark	Actual mark
1	Pharmacokinetic variables	3	100	0	8.57	1.32	1
2	Drug interactions and adverse drug reactions	2	70	30	5.71	0.9	1
3	Autonomic Pharmacology	3	70	30	8.57	1.32	1
4	Pharmacology of Heart failure and Diuretics	1	70	30	2.85	0.45	0.5
5	Pharmacology of GIT	2	80	20	2.85	0.9	1
6	Corticosteroids	1	80	20	2.85	0.45	0.5
7	Drugs used in diabetes	2	100	0	5.71	0.9	1
8	Nonsteroidal anti-inflammatory drugs and treatment of gout	2	70	30	11.42	0.9	1
9	Antiepileptic drugs	1	80	20	2.85	0.45	0.5
10	Chemotherapy	6	60	40	17.14	2.74	2
11	Treatment of respiratory tract	1	75	25	2.85	0.45	0.5
	Total	**24**			**100%**		**10**

Course Specifications of Medical Microbiology and Immunology for Pediatric master program (PE200)

University: Minia

Faculty: Medicine

Department: Medical Microbiology and Immunology

1. Course Information		
ademic Year/level: postgraduate students	***Course Title:*** *Medical Microbiology and Immunology for Pediatrics postgraduate students.*	**de**: **PE200**
- **Number of teaching hours:** - **Lectures:** Total of 20 hours; 1 hours/week - **Practical**/clinical: Total of 5 hours		
Overall Aims of the course	By the end of the course the student must be able to: 1. Know the different types of pathogens, their structure and pathogenesis 1. Know the different methods for laboratory diagnosis and control of different infectious agents. 3. Know the different molecular microbiological techniques and their applications. 4. Know the basics of the host-parasite relationships and the role of the immune system in defending the body against different pathogens and its role in health and disease. 5. Know the principles of biosafety measures and aseptic precautions.	
ntended learning outcomes of course (ILOs): ***Upon completion of the course, the student should be able to:***		

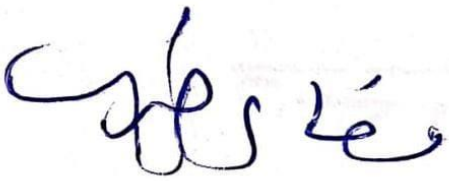
A-Knowledge and Understanding	A1. Define microbial morphology, structure, metabolism and physiology of medically significant microorganisms causing pediatric diseases. A2. List the basis of microbial genetics and biotechnology techniques and their applications. A3. Recognize the taxonomy and classification of different microorganisms. A4. Identify the natural habitat, source of infection and mode of transmission of the different classes of pathogens. A5. Identify the different levels of host-parasite relationship and recognize the microbial virulence factors A6. Recognize the role of the immune system in the health and disease of pediatric population. A7. Define the causes, sources, mode of transmission and treatment of nosocomial infections and know the different methods for infection control.
B-Intellectual Skills	B1. Analyze of different cases of infection to reach a final diagnosis and microbiological identification of the causative organism B1. Solve problems associated with different infections such as microbial resistance to antimicrobial agents, reach a final diagnosis of a certain pathological condition caused by an infectious organism.
C- Professional and Practical Skills	C1. Apply professional applications such as managing a microbiology laboratory. C2. Identify different microbes at microbiology laboratory using basic techniques C3. Apply standards of infection control C4. Apply standard protocol in collection of pathological samples
D-General and transferable Skills	D1. Manipulate microbiological samples and reach a microbiological diagnosis of an infection. D1. Write protocols for identification of a given microorganism. D3. Communicate with colleagues and patients regarding a case caused by a microorganism. D4. Work in/with different groups. D5. Manage a microbiological laboratory.

4.Course Contents			
Topic	**Lecture hours/week**	**Practical/Clinical hours/week**	**Total No. of hours hours/week**
1. Introduction and collection of pathological samples		1	1
2. Cleaning, sterilization and disinfection		1	1
3. Antimicrobial chemotherapy	1	1	2
4. Bacteremia, toxemia and toxic shock	1		1
5. Fever	1		1
6. Laboratory techniques used in epidemiology		1	1
7. Basic immunology 1	1		1
8. Basic immunology 2	1		1
9. Hypersensitivity reactions	1		1
10. Bacterial and viral vaccines	1		1
11. Mycobacterial infections	1		1
12. Neonatal sepsis	1		1
13. General virology	1		1
14. Viral Hepatitis	1		1
15. Human immunodeficiency	1		1
16. Covid-19	1		
17. Bacterial, viral and fungal respiratory tract infections	1		1
18. Bacterial, viral and fungal GIT infections	1		1
19. Bacterial, viral and fungal CNS infections	1		1
20. Blood-transmitted diseases	1		1
21. Vector-transmitted diseases	1		1
22. Nosocomial infections	1		1
23. Infection control and Occupational safety	1	1	2

Total	20	5	25
5.Teaching and Learning Methods	Lectures Practical sessions Seminars		
.Teaching and Learning Methods for students with limited Capacity	Self-learning activities such as use of internet and multimedia.		
7.**Student Assessment**			
A.Student Assessment Methods	End of course written exam: A paper based exam **to assess** the student's comprehension and understanding of the class work Oral exam: to assess student's intellectual and communication abilities regarding basic knowledge and understanding of the course topics.		
Assessment Schedule (Timing of Each Method of Assessment)	End of course exam (written and oral exams) **Week** 23		
Weighting of Each Method of Assessment	Final written Examination: 10 marks Oral Examination:15 marks Total 25 marks		
List of References			
A. Course Notes/handouts	Department Books, and notes on Medical Microbiology and Immunology by microbiology department, Faculty of medicine, Minia university		
B. Essential Books	Jawetz, Melnick and Adelberg's Medical Microbiology 17th edition by Riedel. S (2019); McGraw-Hill Education Review of Medical Microbiology and Immunology 17th edition by warren levinson (2022); McGraw-Hill Education		
C. Recommended Text Books	Janeway's Immunobiology 9th edition by Kenneth Murphy and Casey Weaver, (2016); Garland Publishing Inc. NY, London.		
D. Periodicals, websites	TBD and updated during the course work		
Course Coordinator: Dr. Dalia Nabil			

Head of Department : Prof. Dr. Wafaa Khairy

Date of last update: 3/ 2023



A. Matrix between ILOs and course topics

Contents (List of course topics)	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
	A	B	C	D
1. Introduction and collection of pathological samples	A3 A5 A7	B1	C1,C4	D4 D5
2. Cleaning, sterilization and disinfection	A3 A5 A6	B1	C1,C4	D1 D3
3. Antimicrobial chemotherapy	A1 A5 A6	B1	C1	D1 D3
4. Bacteremia, toxemia and toxic shock	A1 A5 A7	B1 B2	C1, C2	D1 D1 D3
5. Fever	A1	B1	C1	D1 D3 D5
6. Laboratory used in epidemiology	A1	B1	C1,C4	D1 D4
7. Basic immunology 1	A3 A7	B1	C1,C4	D3
8. Basic immunology 2	A1 A2A4	B1	C1,C4	D1 D3 D4
9. Hypersensitivity reactions	A3 A4 A5	B1 B2	C2	D1
10. Bacterial and viral vaccines	A1,A6, A7	B1	C4,C1	D1 D3 D4
11. Mycobacterial infections	A1 A5	B1 B2	C1, C2	D1 D3 D4

12. Neonatal sepsis	**A3 A4**	**B1**	**C1**	**D5**
13. General virology	**A3 A4**	**B1**	**C1,C3**	**D3**
14. Viral Hepatitis	**A1 A3**	**B1 B2**	**C1, C4**	**D1 D3**
15. Human immunodeficiency	**A5 A6**	**B1**	**C1, C2**	**D1 D3 D4**
16. Covid-19	**A1,A1,A3**	**B1,B1**	**C1, C3**	**D1,D1,D3**
17. Bacterial, viral and fungal respiratory tract infections	**A4 A5 A6**	**B1**	**C1**	**D3 D4**
18. Bacterial, viral and fungal GIT infections	**A3 A4**	**B1**	**C1,C3**	**D3 D4**
19. Bacterial, viral and fungal CNS infections	**A1 A2 A3**	**B1**	**C1,C3**	**D4 D5**
20. Blood-transmitted diseases	**A1 A2 A4 A6**	**B1**	**C1, C2**	**D3 D5**
21. Vector-transmitted diseases	**A4 A5**	**B1**	**C1, C2**	**D3**
22. Nosocomial infections	**A1**	**B1**	**C1,C2**	**D4 D5**
23. Infection control and Occupational safety	**A1 A2 A3**	**B1**	**C1,C4**	**D4**

B.Matrix of Coverage of Course ILOs by Methods of Teaching

Methods of Teaching & Learning	Intended Learning Outcomes (ILOs)			
	A. Knowledge Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
	A	B	C	D
Lecture	A1 A2 A3 A4 A5 A6 A7	B1		
Practical			C1 C2 C3 C4	D1 D2 D5
Presentation/seminar				D3 D4

C. Matrix of Coverage of Course ILOs by Methods of Assessment

Methods of Assessment	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
	A	B	C	D
Written exam	A1 A2 A3 A4 A5 A6 A7	B1		
Oral Exam				D2 D3 D4 D5

Blueprint of Medical Microbiology and Immunology Exam paper for 1st part of Master of Pediatric (PE200) (10 marks)

(List of course topics)	HOURS	Intended learning outcomes ILOS		N of item per topic	% of topic	Knowledge & Understanding		Intellectual Skills		Total mark	Actual mark
Contents		Knowledge & Understanding	Intellectual Skills			No of items	mark	No of items	mark		
24. General Microbiology	4	70%	30%	4	20	2	1.3	1	0.7	2	2
25. Immunology	3	70%	30%	3	15	2	1	1	0.5	1.5	1.5
26. Bacteriology	3	70%	30%	3	15	2	1	1	0.5	1.5	1.5
27. Virology	3	70%	30%	3	15	2	1	1	0.5	1.5	1.5
28. Applied Microbiology	5	70%	30%	5	25	4	1.7	2	0.8	2.5	2.5
29. Nosocomial Infection and Infection control	2	70%	30%	2	10	2	0.7	1	0.3	1	1
Total	20				100%					10	10

E. Periodicals, websites	TBD and updated during the course work

Faculty of Medicine
كلية الطب

Medical Biochemistry course specification for master degree in pediatrics (First part)

University: *Minia*
Faculty: *Medicine*
Department: Medical Biochemistry
Last date of approval 3\2023

9. Course Information		
Academic Year/level: First Part of Master Degree	**Course Title**: First Part of Master Degree in pediatrics	**Code**:

Number of teaching hours: **Lectures: 30 hours; 1 hour/week**	
10.Overall Aims of the course	***By the end of the course the student must be able to****:* 1. Provide the postgraduate student with the medical Knowledge and skills essential for the practice of specialty and necessary to gain. 2-understand all molecular basics and diseases. 3- Know different molecular techniques and their advanced applications. 4- Better understand and use the research tools including internet and different laboratory equipment. 5-Know retrieving the literature and understanding the evidence-basedmedicine 6-Maintain learning abilities necessary for continuous medical education. 7-Maintain research interest and abilities.
11.Intended learning outcomes of course (ILOs): ***Upon completion of the course, the student should be able to:***	
E- Knowledge and Understanding	The student finishes the course; he will be able to achieve the following objectives: A1. Illustrate various metabolic processes of carbohydrate, lipid and protein A2. Describe role of minerals and hormones and Vitamins in metabolism. A3. Explain Various metabolic diseases and their diagnosis A4. List the role of enzymes in the chemical reactions in the body and its diagnostic importance. A5. Discuss types of gene therapy and its therapeutic effect. A.6. Describe the metabolism of hemoglobin and nucleic acids.

	A.7- Explain xenobiotics and their detoxification. A8- Explain principles, methodologies, tools and ethics of scientific research.
F- Intellectual Skills	B1- Analysis of different diseases to reach a final diagnosis. B2- Solve problems associated with metabolic diseases. B3- Integrate metabolic pathways with diseases.
G- Professional and Practical Skills	After completing the course, the student should be able to C1. Organize groups, as a leader or as a colleague. C2. Practice willingly the presentation skills through the attendance and participation in scientific activities.
H- General and transferable Skills	After completing the course, the student should be able to D1. Be aware of the advanced biomedical information to remain current with advances in knowledge and practice (self-learning). D2. Prepare for medical progress by having advanced medical research studies

4- Course Contents

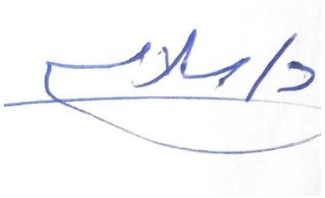
Topic	Lecture (hours)	Practical/Clinical (hours)	Total No. of hours
1. Carbohydrate Metabolism	4	---	4
2. Lipid metabolism	4	---	4
3. Protein metabolism	3	---	3

4. Purines and pyrimidine Metabolism	2	---	2
5. Enzymes	2	---	2
6. Minerals	4	---	4
7. Hormones	3	---	3
8. Vitamins	3	---	3
9. Xenobiotics	2	---	2
10. Gene Therapy	1	---	1
11. Hemoglobin metabolism	2	---	2
Total	**30**	**---**	**30**
5-Teaching and Learning Methods	1-Lectures & discussions. 2-Assignments 3-Attending and participating in scientific conferences and workshops to acquire the general and transferable skills needed		
6-Teaching and Learning Methods for students with limited Capacity	Additional lectures, adjusting time and place of lectures according to their schedule and capacity		
7- Student Assessment			

A-Student Assessment Methods	**1- Written exam** to assess the capability of the student for assimilation and application of the knowledge included in the course. **2-Oral exam** to assess the student intellectual and communication skills regarding basic knowledge and understanding of the course topics, and to help the teaching staff to evaluate the % of achievement of the intended learning outcomes of the course
B-Assessment Schedule (Timing of Each Method of Assessment)	***Assessment 1: one written exam*** *by the end of the course* ***Assessment 2: Oral exam,*** *after the written exam* **Formative only assessment:** log book.
C-Weighting of Each Method of Assessment	**Written examination:** 10 marks **Oral examination**: 15 marks **Total**: 25 marks
8- List of References	
A-Course Notes/handouts	Lectures notes are prepared in the form of a book authorized by the department.
B-Essential Books	-Harper's Biochemistry, Robert K. Murray, Daryl K. Granner, PeterA.Mayes, and VictorW. Rodwell (32th edition, 2022)

C- **Recommended** **Text Books**	Lubert Stryer, Biochemistry (9 th edition, 2019) Lehninger, Biochemistry (8th edition, 2021) Lippincott, Biochemistry (7th edition, 2017)
D-Periodicals, **websites**	To be determined and updated during the course work. **Websites:** 1-http://www.Medical Biochemistry.com. **Periodicals:** 1- International journal of biochemistry 2- Science Direct

Course Coordinator/s:
Dr. Heba Marey
Head of Department:
Prof. Dr. Salama Rabie Abd El Rahiem



Date of <u>last update</u> & approval by department Council:

4 / 2023

جامعة / أكاديمية : المنيا كلية / معهد : الطب قسم : الكيمياء الحيوية	مسمي المقرر	جزء اول ماجستير طب الأطفال
	كود المقرر	

A. Matrix of Coverage of Course ILOs By Contents

Contents (List of course topics)	Week No.	Intended Learning Outcomes (ILOs)			
		A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General &

					Transfera ble Skills
		A	B	C	D
1. Carbohydrate Metabolism	**1**	**A1 A3 A4**	**B3**	**C2**	
2. Lipid metabolism	**2**	**A1 A3 A4**	**B2 B3**	**C2**	
3. Protein metabolism	**3**	**A1 A3 A4**	**B1 B2 B3**	**C1 C2**	
4. Purines and pyrimidine metabolism	**4**	**A3 A6**	**B1**	**C1**	
5. Enzymes	**5**	**A4**	**B2**		
6. Minerals	**6**	**A2 A3**	**B1**	**C1**	
7. Hormones	**7**	**A2 A3**	**B3**	**C2**	
8. vitamins	**8**	**A2 A3**	**B1**	**C2**	

9. Xenobiotics	**9**	**A7**	**B1 B3**		
10.Gene Therapy	**10**	**A5**	**B3**	**C1**	
11.Hemoglobin metabolism	**11**	**A3 A6**	**B2**	**C2**	

B. Matrix of Coverage of Course ILOs by Methods of Teaching & Learning

Methods of Teaching & Learning	**Intended Learning Outcomes (ILOs)**			
	A. Knowledge & Understanding	**B. Intellectual Skills**	**C. Professional & Practical skills**	**D. General & Transferable Skills**
	A	**B**	**C**	**D**
Lecture	**A1 A2 A3 A4 A5 A6**	**B2 B3**		

Presentation/seminar				**D1 D2**
Journal club				**D1 D2**
Training courses & workshops				**D1 D2**
Other/s (Specify)		**B3 B1**	**C1 C2**	**D1 D2**

C. Matrix of Coverage of Course ILOs by Methods of Assessment

Methods of Assessment	**Intended Learning Outcomes (ILOs)**			
	A. Knowledge & Understanding	**B. Intellectual Skills**	**C. Professional & Practical skills**	**D. General & Transferable Skills**

	A	B	C	D
Written exam	**A1 A2 A3 A4 A5 A6 A7 A8**	**B1 B2 B3**		
Oral Exam	**A1 A2 A3 A4 A5 A6 A7**	**B2 B3**		
Assignment				**D1 D2**
Other/s(Specify)		**B1 B2**	**C2**	**D2**

Biochemistry Department

Blueprint of Medical

Blueprint of Examination Paper
(10 marks)

	Topic	Hours	Knowledge %	Intellectual %	% of topic	No of items per topic	Knowledge		ntellectual		Marks	Actual mark
							No of Items	*Mark*	*No of Items*	*Mark*		
1	**Carbohydrate Metabolism**	4	70	30	**13.3**	2	1	0.665	1	0.665	**1.33**	**1.5**
2	**Lipid metabolism**	4	70	30	**13.3**	2	1	0.665	1	0.665	**1.33**	**1.5**
3	**Minerals**	3	75	25	**10**	2	1	0.5	1	0.5	**1**	**1**
4	**Purines and pyrimidine Metabolism**	2	70	30	**6.6**	2	1	0.33	1	0.33	**0.66**	**0.5**
5	**Enzymes**	2	75	25	**6.6**	2	1	0.33	1	0.33	**0.66**	**0.5**
6	**Protein metabolism**	4	70	30	**13.3**	2	1	0.566	1	0.566	**1.33**	**1.5**
7	**Hormones**	3	80	20	**10**	1	1	1	--	--	**1**	**1**
8	**Vitamins**	3	80	20	**10**	1	1	1	--	--	**1**	**1**
9	**Xenobiotics**	2	75	25	**6.6**	2	1	0.33	1	0.33	**0.66**	**0.5**
10	**Gene Therapy**	1	75	25	**3.3**	2	1	0.165	1	0.165	**0.33**	**0.5**

11	**Hemoglobin metabolism**	2	80	20	**6.6**	2	1	0.33	1	0.33	**0.66**	**0.5**	
	Total	**30**			**100 %**						**10**	**10**	

OO

Course Specification of Medical Ethics

(2022-2023)

University: Minia

Faculty: Medicine

Program on which the course is given: Master degree of all clinical

Major or minor element of program: Medical ethics, ethics of medical research

Department offering the program: all clinical Department

Department offering the course: Forensic Medicine & Clinical Toxicology Department

Academic year / Level: First part

A. Basic Information		
• **Academic Year/level:**	• **Course Title:**	• **Code:**

Post graduate; 1st Part MSC, all clinical	**Course Specification of Medical Ethics (Master degree of all clinical)**	
• **Number of teaching hours:** - **Lectures: Total of 30 hours; ٢ hour/week** - **Practical: Total of 15 hours; 1 hour/week**		
B- Professional Information		
1. Overall Aims of the course	**By the end of the course the student should be able to identify the value of studying and practicing medicine, the duties of doctors towards their patients, colleagues and community, the ethics in medical consultations among colleagues and also able to explain respect the patient's confidentiality and secrets, recognize the role of health care providers in the community and describe medical errors, negligence and legal issues, ethics of medical research especially on**	

	human beings and finally able to explain ethics and evidence based medicine
2. Intended learning outcomes of course (ILOs): ***Upon completion of the course, the student should be able to:***	
A- Knowledge and Understanding	**A.1- Identify the basic concept of learning and practicing medicine from the religious and human point of view.** **A.2- Identify the very beneficial impressive history of medicine; ethics related.** **A.3- Classify the main principles of medical ethics.** **A.4- Recognize an integrated approach to deal with patients, their families, community and medical staff in an ethical, legal and human manner.** **A.5- Identify rules in low and regulations to deal with patients in practicing medicine.** **A.6- Explain the standard and accredited methods of clinical research especially on human beings.**
B- Intellectual Skills	**B.1- Design approach to patients in different situations; critical and noncritical ones.**

	B.2- Develop adequate communication skills with patients, community and colleagues. **B3- Conclude in medical researches on clear ethical basis.** **B.4- Use knowledge and learn according to standard basis worldwide.** **B.5- Apply and practice medicine according to concepts of evidence based medicine.** **B.6- Recognize common ethical dilemma and suggest a proper solution.**
C- Professional and Practical Skills	**C.1- Use a high professional approach with colleagues and patients.** **C.2- Modify steps of upgrading his/her educational, academic and clinical carriers.** **C.3- Use the standard guidelines in managing patients.** **C.4- Identify what is called as clinical governance and auditing his /her Performance.**

D- General and transferable Skills	**D.1- Identify how to respect his/herself and the profession.** **D.2- Develop adequate behavior and skill communications with community.** **D.3- Modify life and live like others sharing social and national affairs.** **D.4- Develop the capacity of helping people and share in upgrading their culture and education.** **D.5- Identify how to participate in the national and social affairs and responsibilities.**

3- Course Contents

TOPIC	Lecture Hours	Practical Hours	Total hours
Medical Responsibility and Duties of the physician	**2**	**1**	**3**
Medicolegal aspect of cloning	**2**	**1**	**3**
Defensive Medicine	**2**	**1**	**3**
Diagnosis of death & Death Certificates	**2**	**1**	**3**
Consent in medical field	**2**	**1**	**3**
Medical malpractice	**2**	**1**	**3**
Medical syndicate	**2**	**1**	**3**
Professional secrecy	**2**	**1**	**3**
Physician disciplinary proceeding	**2**	**1**	**3**
Domestic Violence	**2**	**1**	**3**
Euthanasia (Mercy death)	**2**	**1**	**3**
Ethics in medical research	**2**	**1**	**3**
Medical reports	**2**	**1**	**3**
Rules of using addictive drugs among physicians	**2**	**1**	**3**

Medical certificates	**2**	**1**	**3**
Total	**(30 hr.)** **٢/W**	**(15 hr.)** **1/W**	**(45 hr.)** **3/W**

4- Teaching and Learning Methods	**4.1 - Straight lectures; power point presentations** **4.2 - Practical lessons** **4.3 - Brain storming with the students** **4.4 - Questions and Answers**
5- Teaching and Learning Methods to students with limited Capacity	**(Not applicable)**
6- Student Assessment	
G. Student Assessment Methods	**<u>TENDANCE CRITERIA</u>: by Faculty laws (log book)** **<u>ASSESSMENT TOOLS:</u>** ***Final Written exam:** **short essay to asses knowledge and understanding.** **problem solving to asses intellectual skills** **MCQ to assess knowledge and intellectual skills.**

	***Oral exam; to asses knowledge and understanding. Also intellectual skills, attitude, and communication.** ***Practical exam: to assess practical and professional skills.**
H. Assessment Schedule	• **Final Written exam week: 24-28** • **Oral exam week: 24-28** • **Practical exam week: 24-28**
I. Weighting of Assessment	• **Final Written exam 40% (40 Marks)** • **Oral & Practical exams 60% (60 Marks)** • **Total 100% (100 Marks)**
7- List of References	
I. Course Notes/handouts	**Department book by staff members.** **Log Book.**

J. Essential Books (text books)	**Medical Ethics Manual, 2nd Edition John R. Williams, 2009.** **Medical Ethics, 2nd Edition, Michael Boylan, 2014.**
K. Recommended Books	**Text book of medical ethics, Erich H. Loewy, 1989**
L. Periodicals	**Journal of Medical Ethics** **Journal of Medical Ethics and History of Medicine**
M. Web sites	**https://en.wikipedia.org/wiki/Medical_ethics** **https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5074007/**
8- Facilities required for teaching and learning	**Classrooms for theoretical lectures and tutorials**

Course Coordinators:

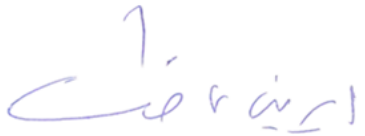
Prof. Dr. Morid Malak Hanna

Dr. Mennatallah Mahmoud Ahmed

Head of Department:

Prof. Dr. Irene Atef Fawzy

Date of last update & approval by department council: 4/2023



جامعة/أكاديمية : .....المنيا.....

كلية / معهد: .....الطب البشرى.....

قسم: .....الطب الشرعى والسموم الأكلينكية.....

Course Specification of Medical Ethics Master degree of all clinical (First part))	**مسمى المقرر**
	كود المقرر

A. The Matrix of Coverage of Course IL by Contents

Contents	**Intended Learning Outcomes (ILOs)**			
	A. Knowledge & Understanding	**B. Intellectual Skills**	**C. Professional & Practical skills**	**D. General & Transferable Skills**
	A	**B**	**C**	**D**
Medical Responsibility and Duties of the physician	**A1,3**	**B4**	**C1**	**D1,2**
Medicolegal aspect of cloning	**A1,2**	**B3**	**-**	**-**

Defensive Medicine	**A4,5**	**B6**	**C3**	**D3**
Diagnosis of death & Death Certificates	**A1,2**	**B2**	**-**	**-**
Consent in medical field	**A2,5**	**-**	**-**	**-**
Medical malpractice	**A1,6**	**B5**	**C4**	**D5**
Medical syndicate	**A5,6**	**B3**	**-**	**-**
Professional secrecy	**A1,2,3**	**-**	**-**	**D4**
Physician disciplinary proceeding	**A2,4,5**	**B2**	**-**	**D1.2,3**
Domestic Violence	**A2,4,6**	**-**	**C2**	**-**
Euthanasia (Mercy death)	**A1,3,4**	**B1**	**-**	**-**

Ethics in medical research	**A1,2**	**-**	**-**	**-**
Medical reports	**A3,4**	**-**	**C1,2**	**D1.2**
Rules of using addictive drugs among physicians	**A1,4**	**B1,2**	**-**	**-**
Medical certificates	**A1,6**	**B3,5**	**C3**	**D1,4**

B. Matrix of Coverage of Course ILOs by Methods of Teaching & Learning

Methods of Teaching & Learning	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
	A	B	C	D
Lecture	A1,2,3,4,5,6	B1,2,3,4,5,6	-	-
Practical	-	-	C1,2,3,4	-
Presentation/seminar	-	-	-	D1,2,3,4,5
Journal club	-	-	-	-
Thesis discussion	-	-	-	-
Training courses & workshops	-	-	-	D1,2,3,4,5

C. Matrix of Coverage of Course ILOs by Methods of Assessment

Methods of Assessment	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
	A	B	C	D
Written exam	A1,2,3,4,4,5,6	B1,2,3,4,5	-	-
Practical exam	-	-	C1,2,3,4,5	-
Oral Exam	A1,2,3,4,4,5,6	B1,2,3,4,5	-	-

Blueprint of Forensic Medicine and Clinical Toxicology Department

Blueprint of 1st master
Postgraduates" Medical Ethics Examination Paper (40 marks)

	Topic	Hours	Knowledge %	Intellectual%	% of topic	N of items Per topic	Knowledge		Intellectual		Marks	Actual Mark
							N of items	Mark	N of items	Mark		
1	**Medical Responsibility and Duties of the physician & Defensive Medicine**	4	75	25	**13.32**	1	1	**5.32**	1	**10**	**5.32**	**5**
2	**Medicolegal aspect of cloning**	2	75	25	**6.66**	1	1	**2.66**	---	**---**	**2.66**	**3**
3	**Diagnosis of death & Death Certificates**	2	75	25	**6.66**	1	1	**2.66**	---	**---**	**2.66**	**3**
4	**Consent in**	4	70	30	**13.32**	1	1	**5.32**	1	**10**	**5.32**	**5**

	medical field & Medical malpractice											
5	**Medical syndicate &Professional secrecy**	4	75	25	**13.32**	1	1	**5.32**	---	**---**	**5.32**	**5**
6	**Physician disciplinary proceeding & Euthanasia (Mercy death)**	4	75	25	**13.32**	1	1	**5.32**	1	**10**	**5.32**	**5**
7	**Domestic Violence**	2	70	30	**6.66**	1	1	**2.66**	---	**---**	**2.66**	**3**
8	**Ethics in medical research**	2	80	20	**6.66**	1	1	**2.66**	---	**---**	**2.66**	**3**
9	**Medical reports & Medical certificates**	4	80	20	**13.32**	1	1	**5.42**	1	**10**	**5.42**	**5**
10	**Rules of using addictive drugs among physicians**	2	75	25	**6.76**	1	1	**2.66**	---	**---**	**2.66**	**3**
	Total	**30**			**100%**			**40**		**40**	**40**	**40**