Peer Revision

Reviewers	University	Date of Revision
- Prof. Dawlat Salem	Cairo	10/12/2011
- Prof. Ahmad K. Mansur	Mansura	28/11/2011

Program Specification of Medical Doctorate Degree of Pediatrics

Sohag University **Faculty of Medicine**

A. Basic Information

1. Program Title: M.D in Pediatrics
2. Program Type: Single
3. faculty: Faculty of Medicine
4. Department: Pediatrics
5. Coordinator: Prof. Mostafa Abo Sedara
6. Assistant coordinator: Mustafa Ashry
7. External Evaluator: Prof Asmaa Hamed Shoreet (Prof. of Pediatrics, Assiut University)
8. Last date of program specifications approval: Faculty council No. "317", decree No. "1533" dated 17/12/2018.

B. Professional Information

1. Program Aims:

The aim of this program is to provide the postgraduate with the advanced Pediatric knowledge and skills essential for the mastery of practice of Pediatric specialty and necessary to provide further training and practice in the field of Pediatrics through providing:

1- Recent scientific knowledge essential for the mastery of practice of pediatrics according to the international standards.

2- Skills necessary for proper diagnosis and management of patients including diagnostic, problem solving and decision making skills.

Provision of sound ethical principles related to pediatric practice. 3-

4- Active participation in community needs assessment and problems identification.

5- Upgrading learning abilities necessary for continuous medical education.

6- Upgrading research interest and abilities.

2. Attributes of the post graduate:

1. Efficient in carrying out the basics and advances in methodologies of scientific research in Pediatrics.
2. The continuous working to add new knowledge in his field.
3. Applying the analytical course and critical appraisal of the knowledge in his specialty and related fields.
4. Merging the specialized knowledge with the other related knowledge with conclusion and developing the relationships in between them.

Program Specification of Medical Doctorate Degree of Pediatrics

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A. **Basic Information**

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2. Attributes of the post graduate:

1. Efficient in carrying out the basics and advances in methodologies of scientific research in Pediatrics.
2. The continuous working to add new knowledge in his field.
3. Applying the analytical course and critical appraisal of the knowledge in his specialty and related fields.
4. Merging the specialized knowledge with the other related knowledge with conclusion and developing the relationships in between them.

5. Showing a deep awareness with the ongoing problems, theories, and advanced sciences in his specialty.
6. Determination of the professional problems and creating solutions for them.
7. Efficient in carrying out the professional skills in his specialty.
8. Using advanced suitable technologies which serves his practice.
9. Efficient communication and leadership of team work in his specialty.
10. Decision making through the available information.
11. Using the available resources efficiently and working to find new resources.
12. Awareness with his role in the development of the society and preserve environment.
13. Behaving in a way which reflects his credibility, accountability, and responsibility.
14. Keeping continuous self development and transfer his experiences and knowledge to others.

3. Program Intended Learning Outcomes (ILOs)

a) Knowledge and Understanding:

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

a1. Mention the recent advances in physiology related to pediatrics.
a2. Describe the recent advances in pathology of pediatric diseases.
a3. Mention the recent advances in biostatistics and computer.
a4. Mention recent advances in pediatric diseases and their causation and pathophysiology
a5. Describe recent advances in the diagnosis of pediatric diseases and their complications.
a6. Describe recent advances in the management of pediatric diseases .
a7. Mention recent advances in prevention of pediatric diseases.
a8. Mention recent advances in the care of term and preterm newborn babies
a9. list recent advances in evaluating normal and abnormal patterns of growth and development of infants and children
a10. Explain recent advances in genetic diseases and ways of their diagnosis and the concepts of genetic counseling
a11. Describe recent advances in the nutritional requirements of infants and children and nutritional abnormalities

a12. Describe recent advances in methods of promoting health of infants and children
a13. Mention the principles, methods and steps of conducting scientific researches
a14. Mention the ethical aspects of conducting scientific researches in the field of pediatrics
a15. Describe legal and ethical aspects of professional pediatric practice.
a16. List the principles and fundamentals of quality of professional practice in the field of pediatrics.
a17. Mention the effect of professional practice on the environment and the methods of environmental development and maintenance.

b) Intellectual Skills

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

b1. Interpret data acquired through history taking to reach a provisional diagnosis for pediatric problems .
b2. Select from different diagnostic alternatives the ones that help reaching a final diagnosis for pediatric problems.
b3. Conduct research studies, that add to knowledge.
b4. Formulate scientific papers in the area of pediatrics.
b5. Assess Risk in professional practices in the field of pediatrics.
b6. Plan to improve performance in the field of pediatrics.
b7. Identify different pediatric problems and find solutions for them.
b8. Have the ability to innovate nontraditional solutions to pediatric problems .
b9. Manage Scientific discussion based on scientific evidences and proofs.
b10. Criticize researches related to pediatrics.

c) Professional and Practical Skills

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

c1. Master the basic and modern professional clinical skills in the area of pediatrics.
c2. Write and evaluate medical reports.
c3. Evaluate and develop methods and tools existing in the area of pediatrics.
c4. Use diagnostic and therapeutic technological methods to serve the professional practice in pediatric problems.
c5. Train junior staff through continuous medical education programs.
c6. Design new methods, tools and ways of professional practice

d) General and Transferable Skills

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

d1. Communicates effectively by different types of effective communication.

d2. Use appropriate computer program packages and the internet to serve the development of professional practice

d3. Teach others and evaluate their performance.

d4. Assess him-self and identify his personal learning needs.

d5. Use different sources for information and knowledge.

d6. Work coherently and successfully as a part of a team and as a team leader .

d7. Manage Scientific meetings according to the available time.

4. Academic Standards

Sohag faculty of medicine adopted the general National Academic Reference Standards (NARS) provided by the national authority for quality assurance and accreditation of education (naqaae) for postgraduate programs . This was approved by the faculty council decree No.6854, in its session No. 177, dated 18/5/2009. Based on these NARS; Academic Reference Standards (ARS) were suggested for this program. These ARS were revised by external evaluator, and approved by the faculty council decree No. 7528, in its session No.191, dated 15/3/2010. The adoption of NARS and the suggested ARS were approved by University council degree No 587, in its cession No.60. dated 26-12-2011.

5. Curriculum Structure and Contents

5.a- Program duration : 7 semesters (3.5 years)

5.b- Program structure

5.b.i- Number of hours per week:

Course title	Number of hours / week		
	Lectures	Practical	Clinical
First part :			
Biostatistics & Compute	2	2	----
Research methodology	2	----	----
Primary medical reports	2	2	----
Pathology	1	1.5	----
Medical Physiology	1.5	--	----
Second part :			
Pediatrics	3.75	----	7.5

code	Item		No	%
b.i	Total credit hours	Compulsory	90	100
		Elective	0	0
		Optional	0	0
b.iii	credit hours of basic sciences courses		6	6.6

b.iv	credit hours of courses of social sciences and humanities	0	0
b.v	credit hours of specialized courses:	60	66
b.vi	credit hours of other course		
b.vii	Practical/Field Training	8	8.9%
b.viii	Program Levels (in credit-hours system): Level 1: 1st part Level 2: 2nd Part Level 3: Thesis	 15 52 15	 16.7 57.8 16.7

6. Program Course

* 6 courses are compulsory

6.d- Level of Program

Semester…1…..

First part :

A. Compulsory:

Course title	**Total number of credit hours**	**Number of hours / week**			**Program ILOs covered (by No)**
		Lectures	**practical**	**clinical**	
Biostatistics &Computer	3	2	1	----	a3, b1 ,b10,c1,d2 ,d5
Research methodology	3	2	1	----	a13 , a14, b2,b3,b4, b10, c1,d5,d6
Primary medical reports	2	2	----	----	a15, b1,b7,c2,c4,d4, d5,d6
Pathology	3	3	----	----	a2 ,b1,b7,b8,c2,c3,c4, c6,d1,d2,d4,d5,
Medical Physiology	3	3	----	----	a1,b7,b8,c3,c6,d1,d2,d4,d 5,

Second part :

A. Compulsory:

Course title	Total number of hours	Number of hours / week			Program ILOs covered (by No)
		Lectures	practical	clinical	
Pediatrics	53	25	----	28	a4 ,a5 ,a6 ,a7, a8, a9, a10,a11 ,a12 ,a16 ,a17,b1, b2, b3, b4 ,b5 ,b6 ,b7 ,b8 ,b9 ,b10,c1, c2, c3 ,c4 ,c5 ,c6,d1, d2, d3, d4, d5, d6 , d7

7. Program Admission Requirements

I- General Requirements.

- Candidate should have either MBBch degree from any Egyptian Faculty of Medicine or Equivalent Degree from Medical Schools abroad approved by the ministry of high Education.
- Candidate should know how to speak & write English well
- Candidate should have computer skills**.**

- Follow postgraduate bylaw Regulatory rules of Sohag Faculty of Medicine approved by the ministerial decree No. (44), dated 6/1/2010.

II- Specific Requirements

- Master degree in Pediatrics with at least "Good Rank".

8. Regulations for Progression and Program Completion

Duration of program is 90 credit hours (≥7 semesters ≥3.5 years), starting from registration till acceptance of the thesis; divided to:

First Part: (15 Credit hours ≥6 months ≥1 semester):

- Program-related basic science, Research Methodology, Ethics & medical reports, Biostatistics and computer.
- 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 October — 2nd in April after fulfillment of the credit hours.
- At least 60% of the written exam and 60% of the total oral and practical/clinical is needed to pass in each course.
- For the student to pass the first part exam, a score of at least 60% (Level D) in each course is needed.
- Those who fail in one course need to re-exam it only.
- GPA of ≥1.3 is needed to pass this level (semester).

Second Part: (50-60 Credit hours ≥24 months= 4 semesters):

- Program related specialized science of Pediatrics courses. At least 24 months after passing the 1st part should pass before the student can ask for examination in the 2nd part.
- Fulfillment of the requirements in each course as described in the template and registered in the log book (8 Credit hours; with obtaining ≥75% of its mark) is a prerequisite for candidates to be assessed and undertake part 1 and part 2 examinations; the credit hours of the logbook are calculated as following:
  - Each Cr. Hr.= 60 working Hrs.
  - Logbook= 8 Cr. Hr. X 60 working Hrs = 480 Working Hrs.
  - Collection of working Hrs. is as following:

Activity		**Hrs**
Grand rounds	**اجتماع علمى موسع**	**٦**
Training courses	**دورات تدريبية**	**12/ day**

Conference attendance	**حضور مؤتمرات علمية** **داخلى** **خارجة**	**١٢/day** **18/day**
Thesis discussion	**حضور مناقشات رسائل**	**٦**
Workshops	**حضور ورش عمل**	**١٢/day**
Journal club	**ندوة الدوريات الحديثة**	**٦**
Seminars	**لقاء علمى موسع**	**٦**
Morbidity and Mortality conference	**ندوة تحليل المخاطر المرضية أوالوفاة**	**٦**
Self education program	**برنامج التعليم الذاتى**	**٦**

- Two sets of exams: 1st in October - 2nd in April.
- At least 60% of the written exam is needed to be admitted to the oral and practical exams.
- 4 times of oral and practical exams are allowed before the student has to re-attend the written exam.

Third Part (Thesis) (15 Credit hours =24-48 months=4-8 semester):

- Documentation of the subject should not be delayed for > 1.5 years after registration.
- Could start after registration and should be completed, defended and accepted after passing the 2nd part final examination, after passing of at least 24 months after documentation of the subject of the thesis and after publishing of at least one paper from the thesis in a specialized peer-reviewed journal.
- Accepting the thesis is enough to pass this part.

9. Methods of student assessments:

Method of assessment	weight	The assessed ILOs
1-Research assignment		- General transferable skills, intellectual skills
2-Written Exams: -Short essay: 40% -structured questions: 25% -MCQs: 20% -Commentary, Problem solving: 15%	50%	 - Knowledge - Knowledge - Knowledge, intellectual skills - Intellectual skills, General transferable skills
3-OSCE/ OSPE	50%	-Practical skills, intellectual skills, general transferable skills
4-Structured Oral Exams		- Knowledge, Intellectual skills, General transferable skills

Assessment schedule:

Part I:

- Biostatistics & Computer: Written Exam (2 hours) + Structured oral Exam+ OSPE
- Research Methodology: Written Exam (2 hours) + structured oral Exam+ OSPE
- Primary medical reports: Written Exam (2 hour) + Structured oral Exam+ OSPE
- Pathology: Written Exam (2 hours) + structured oral Exam.
- Applied Physiology: Written Exam (2 hours) + structured oral Exam.

Part II:

- Pediatrics and its subsidiaries: Two Written Exams (3 hours for each) + one written exam containing commentary (1.5 hours) + OSCE + Structured oral Exam.

10. Evaluation of Program:

Evaluator	**Tool**	**Sample**
1- Senior students	**Questionnaire**	**25**
2- Alumni	**Questionnaire**	**15**
3- Stakeholders (Employers)	**Questionnaire**	**60**
4-External Evaluator(s) (External Examiner(s))	**Report**	**1**
5- Other		

Course Specifications of Biostatistics and Computer for M.D degree in Paediatrics

Sohag University **Faculty of Medicine**

1. Program Title: M.D degree in Pediatrics
2. Minor/major element of the program: minor
3. Department offering the program: Pediatrics Department
4. Department offering the course: Community Medicine and public Health Department
5. Academic year/level: First part
6. Date of specification approval: Faculty council No. "317", decree No. "1533" dated 17/12/2018

A. Basic Information

Title: Biostatistics and computer for M.D degree in paediatrics

Code: COM 0526-300

Title	Lecture	Practical	Total	Credit
Biostatistics and computer	30	30	60	3

B. Professional Information

1. **Course aims:**

The aim of this program is to provide the postgraduate with the advanced biostatistical and computer knowledge and skills essential for the mastery of practice of Pediatric specialty and necessary to provide further training and practice in the field of Pediatrics.

2. Intended Learning Outcomes of Courses (ILOs)

a) Knowledge and understanding:

By the end of the course, the student is expected to be able to:

a1. Mention the recent advances in biostatistics, computer related to pediatrics .
a2. Define the sources of data and methods of collection
a3. Summarize data, construct tables and graphs
a4. Calculate measures of central tendency and measures of dispersion
a5. Describe the normal curves and its uses
a6. Interpret selected tests of significance and the inferences obtained from such tests
a7. Illustrate selected tests of significance for parametric and non parametric inferences.
a8. Identify factor analysis and discrimination analysis

b) Intellectual Skills

By the end of the course, the student is expected to be allowed to:

b1. Interpret data acquired by statistical analysis.

b2. Criticize researches related to pediatrics based on proper understanding of statistical basis.

c) Professional and Practical Skills:

By the end of the course, the student is expected to practice the following:

c.1 Master the basic and modern professional statistical skills in collection, analysis and interpretation of data that help professional pediatric practice.

d) General and Transferable Skills:

By the end of the course, the student is expected to be able to:

d.1 Use appropriate computer program packages and the internet to serve the development of professional practice.

d.2 Use of different sources for information and knowledge about biostatistics.

3. Contents

Topic	No. of hours	Lecture	Tutorial/ Practical
Recent advances in collection, analysis and interpretation of data	6	3	3
-Details of Tests of significance: Proportion test	6	3	3
Chi-square test	6	3	3
Student T test	6	3	3
Paired T test	6	3	3
-Correlation	4	2	2
-Regression	6	3	3
-ANOVA test	4	2	2
-Discrimination analysis	6	3	3
Factor analysis	4	2	2
- parametric and non parametric tests	6	3	3
Total	**60**	**30**	**30**
Total Credit hours	**3**	**2**	**1**

4. Teaching and Learning Methods

4.1- Lectures

4.2- Practical sessions

4.3- Computer search assignments

4.4- Computer application

5. Student Assessment Methods

Method of assessment	The assessed ILOs
5.1- Observation of attendance and absenteeism.	- General transferable skills, intellectual skills

5.3-Written Exam: -Short essay: 40% -structured questions: 25% -MCQs: 20% -Commentary, Problem solving: 15%	 - Knowledge - Knowledge - Knowledge, intellectual skills - Intellectual skills, General transferable skills,
5.4-Structured Oral Exam	- Knowledge, Iintellectual skills, General transferable skills
5.6 Computer search assignment	-General transferable skills, intellectual skills

Assessment Schedule

Assessment 1……..Final written exam Week: 24

Assessment 2……..Final Structured Oral Exam Week: 24

Assessment 3 Attendance and absenteeism throughout the course

Assessment 4 Computer search assignment performance throughout the course

Weighting of Assessments

Final-term written examination	50	%
Structured Oral Exam	50	%
Total	100	%

Formative only assessments: attendance and absenteeism and Computer search assignments performance.

6. List of References

6.1- Essential Books (Text Books)

1-Maxy-Rosenau Public health and preventive medicine, 2008.,Robert Wallace, publisher McGraw-Hill Medical; 15 edition.

6.2- Recommended Books

1- Dimensions of Community Based projects in Health Care, 2018. Arxer, Steven L., Murphy, John W.; 1st edition.

2- Parks Text Book of Preventive & Social Medicine. 2017., K. Park. BanarsidasBhanot Publishers; 23 edition.

3- Clinical Epidemiology: The Essentials, 2013, Robert F., Suzanne W. Fletcher, Grant S., publisher Lippincott Williams & Wilkins; 5 edition.

6.3- Periodicals, Web Sites, …etc

1-American Journal of Epidemiology

2-British Journal of Epidemiology and Community Health

3- WWW. CDC and WHO sites

7. Facilities Required for Teaching and Learning

1- Adequate infrastructure: Including teaching places, comfortable desks, good source of aeration, bathrooms, good illumination, safety and security tools.

2- Teaching tools: Including screens, computers, data show, projectors, flip charts, white boards, video player, digital video camera, scanner, copier, color and laser printer.

Course Coordinator: Dr/Foad Metry Atya

Head of Department: Prof/ Ahmed Fathy Hammed

Date: 18/12/2011, Revised:1/9/2012, Revised:1/12/2013, Revised:1/12/2018

Course Specifications of Research methodology for M.D degree in Paediatrics

Sohag University **Faculty of Medicine**

1. Program Title: M.D degree in Pediatrics
2. Minor/major element of the program: minor
3. Department offering the program: Pediatrics Department
4. Department offering the course: Community Medicine and public Health Department
5. Academic year/level: First part
6. Date of specification approval: Faculty council No. "317", decree No. "1533" dated 17/12/2018

A. Basic Information

Title: Research methodology for M.D degree in Paediatrics
Code: COM 0526-300
Total hours:

Title	lecture	practical	total	credit
research methods	**30**	**30**	**60**	**3**

B. Professional Information

1. Course Aims:

The aim of this program is to provide the postgraduate with the advanced research methodology knowledge and skills essential for the mastery of practice of Pediatric specialty and necessary to provide further training and practice in the field of Pediatrics and upgrade research interest and abilities.

2. Intended Learning Outcomes of Courses (ILOs)

a) Knowledge and Understanding:

By the end of the course, the student is expected to be able to:

a1. Define the recent advances of screening tests pertinent to selected diseases and the at-risk approach in the application of screening tests.
a2. Explain the usefulness of screening tests, and calculate sensitivity, specificity, and predictive values.
a3. Describe the study design, uses, and limitations.
a4. Mention the recent advances of principles, methodologies, tools and ethics of scientific research.
a5. Explain the strategies and design of researches.
a6. Describe bias and confounding.
a7. Describe sampling techniques and list advantages of sampling
a8. Identify principles of evidence based medicine.

b) Intellectual Skills

By the end of the course, the student is expected to be allowed to:
b.1 Select from different research designs the ones that help to conduct pediatric researches.

b.2 Conduct research studies, that adds to knowledge.
b.3 Formulate scientific papers in the area of pediatrics based on proper understanding of research methodology basis.
b.4 Criticize researches related to pediatrics based on proper understanding of research methodology.

c) Professional and Practical Skills:

By the end of the course, the student is expected to practice the following:
c.1 Master the basic and modern professional skills in the area of research methodology that help professional pediatric practice.

d) General and Transferable Skills:

By the end of the course, the student is expected to be able to:
d1. Use of different sources for information and knowledge.
d2. Work coherently and successfully as a part of a team and team's leadership

3. Contents:

Topic	No. of hours	Lecture	Tutorial/Practical
Details of epidemiological studies (case control, cohort and cross sectional)	8	4	4
Clinical trials, Quasi experimental study	6	3	3
Bias and errors	6	3	3
Setting a hypothesis	6	3	3
Recent advances in screening	6	3	3
- Evidence – based Medicine:			
Concept and examples	4	2	2
Applicability	4	2	2
Scientific writing:			
A protocol	4	2	2
A curriculum	4	2	2
Setting an objective	2	1	1
- Critical thinking	2	1	1
Formulation of papers	8	4	**4**
Total hours	**60**	**30**	**30**
Total Credit hours	**3**	**2**	**1**

4. Teaching and Learning Methods

4.1- Lectures.
4.2- Computer search assignments

5. Student Assessment Methods

Method of assessment	The assessed ILOs
5.1- Observation of attendance and absenteeism.	- General transferable skills, intellectual skills
5.3-Written Exam: -Short essay: 40% -structured questions: 25% -MCQs: 20% -Commentary, Problem solving: 15%	 - Knowledge - Knowledge - Knowledge, intellectual skills - Intellectual skills, General transferable skills,
5.4-Structured Oral Exam	- Knowledge, Iintellectual skills, General transferable skills
5.6 Computer search assignment	-General transferable skills, intellectual skills

Assessment Schedule

Assessment 1Final written exam Week: 24
Assessment 2Final Structured Oral Exam Week: 24
Assessment 3 Attendance and absenteeism throughout the course
Assessment 4 Computer search assignment performance throughout the course

Weighting of Assessments

Final-term written examination	50	%
Structured Oral Exam	50	%
Total	100	%

Formative only assessments: attendance and absenteeism and Computer search assignments performance.

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2- Teaching tools: Including screens, computers, data show, projectors, flip charts, white boards, video player, digital video camera, scanner, copier, color and laser printer.

Course Coordinator: Dr/Foad Metry Atya

Head of Department: Prof/ Ahmed Fathy Hammed

Date: 18/12/2011, Revised:1/9/2012, Revised:1/12/2013, Revised:1/12/2018

Course Specifications of Primary Medical reports for M.D degree in Paediatrics

Sohag University **Faculty of Medicine**

1. Program Title: M.D degree in Pediatrics
2. Minor/major element of the program: minor
3. Department offering the program: Pediatrics Department
4. Department offering the course: Forensic Medicine and Clinical Toxicology Department
5. Academic year/level: First part
6. Date of specification approval: Faculty council No. "317", decree No. "1533" dated 17/12/2018

A. Basic Information

Title: Primary medical reports for M.D degree in paediatrics
Code: FOR 0526-300
Total hours:

Title	Lectures	Practical	Total hours
Primary medical reports	15	30	**45**

B. Professional Information

1. Course Aims:

The aim of this program is to provide the postgraduate with the advanced legal and ethical medical knowledge and skills essential for the mastery of practice of Pediatric specialty and necessary to provide further training and practice in the field of Pediatrics and to provide sound ethical principles related to pediatric practice .

2. Intended Learning Outcomes of Course (ILOs):

a) Knowledge and Understanding:

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

a1. Describe legal and ethical and medico-legal aspects of professional pediatric practice , by being able to :
a2. Demonstrate knowledge of toxin and poison
a3. Mention factors affecting toxicity
a4. Demonstrate knowledge of management of poisoning
a5. Demonstrate knowledge of diagnosis of poisoning and describe principles of toxicological sampling
a6. Demonstrate knowledge of treatment of poisoning
a7. Explain how to write a toxicological report
a8. Explain how to write death certificate
a9. Demonstrate knowledge of permanent infirmity
a10. Demonstrate knowledge of obligation of physicians (towards patients, colleagues, community)

a11. Mention types and items of consent, and professional secrecy
a12. Mention types of malpractice, and items of medical responsibility
a13. Mention medico legal aspects of organ transplantation, intersexes states, euthanasia, assisted reproduction techniques
a14. Mention ethical considerations of medical research involving human objects
a15. Describe principles of toxicology of different types of poisonous substances and drugs which operate on human body including classification, mechanism of action, clinical features of toxicity, circumstances, diagnosis and clinical management

b) **Intellectual Skills**:

By the end of the course the student should have the ability to:

b1. Interpret data acquired through history taking and clinical examination to write medical report.
b2. Identify and solve clinical problems related to poisoning .

c) Professional and Practical Skills:

By the end of the course the student should have the ability to:

c1. Write and evaluate medical reports and death certificates.
c2. Use and evaluate diagnostic methods to prepare medical reports for the professional practice in pediatric problems.

d) General and Transferable Skills:

By the end of the course the student should have the ability to:

d1. Assess himself and identify his personal learning needs.
d2. Use of different sources of information and knowledge.
d3. Work coherently and successfully as a part of a team and team's leadership.

3. Contents of the Course:

Topic	No. of hours	Lecture	practical
Definition of poison, classification of poison and factors that influence toxicity	4.75	1.25	3.5
Diagnosis & Management of poisoning including: respiratory support, circulatory support and neurological support	4.75	125	3.5
toxicological sampling and permanent infirmity	4.75	1.25	3.5
How to write a toxicological report & How to write death certificate	4.75	1.25	3.5
Obligation of physicians (towards patients, colleagues, community)	4.75	1.25	3.5
Consent, and professional secrecy	4.75	1.25	3.5
Types of malpractice, and items of medical responsibility	4.25	1.25	3
Medicolegal aspects of organ transplantation, intersex states, euthanasia, assisted reproduction techniques	4.25	1.25	3
Ethical considerations of medical research involving human subjects	4.25	1.25	3
Total hours	**45**	**15**	**30**

Total credit hours	**2**	**1**	**1**

4. Teaching methods:

4.1. Lectures

4.2. Attending and participating in scientific conferences, workshops and thesis discussions. (To acquire the general and transferable skills)

4-3 Assignments

5. Methods of Students assessment:

Method of assessment	The assessed ILOs
5.1- Observation of attendance and absenteeism.	- General transferable skills, intellectual skills
5.3-Written Exam: -Short essay: 40% -structured questions: 25% -MCQs: 20% -Commentary, Problem solving: 15%	 - Knowledge - Knowledge - Knowledge, intellectual skills - Intellectual skills, General transferable skills,
5.4-Structured Oral Exam	- Knowledge, Iintellectual skills, General transferable skills
5.6 Computer search assignment	-General transferable skills, intellectual skills

Assessment Schedule

1. **Assessment 1:** One written exam Week 24
2. **Assessment 2:** Final Structured Oral Exam Week 24

Weighting of Assessments

Final-term written examination	٥٠%
Structured Oral Exam	٥٠%
Total	100%

6. List of references:

Essential books

Simpson's Forensic Medicine, 13th Edition, by Jason Payne-James, RichardJones,Steven B Karch,John Manlove. published by Hodder& Stoughton Ltd (2011).

Goldfrank'sToxicologic Emergencies, (9th ed.) by Lewis S. Nelson, Robert S. Hoffman, Mary Ann Howland, Neal A Lewin, Lewis R. Goldfrank, Neal E. Flomenbaum. Published by McGraw-Hill (2011)

Emergency Toxicology,Peter Viccellio,(2nded.) Published by Lippincott Williams & Wilkins (1998)

Recommended books

Medical ethics.(1997)Robert M Veatch. 2nd edition.Jones & Bartlett publishers

Periodicals and websites……etc.

Egyptian journals of forensic medicine and clinical toxicology

International journals of forensic medicine and clinical toxicology

www.sciencedirect.com

https://emedicine.medscape.com

https://www.ncbi.nlm.nih.gov/pmc/

7. Facilities Required for Teaching and Learning

1. **Adequate infrastructure:** Including teaching places, comfortable desks, good source of aeration, bathrooms, good illumination, safety and security tools.

2. **Teaching tools:** Including screens, computers, data show, projectors, flip charts, white boards, video player, digital video camera, scanner, copier, color and laser printer.

Course Coordinator: Dr. Soheir Ali Mohamed

Head of Department: Dr. Maha Abdel Hamed Hilal

Date: 18/12/2011, Revised:1/9/2012, Revised:1/12/2013

Course Specifications of Medical Physiology for M.D degree in Paediatrics

Sohag University **Faculty of Medicine**

1. Program Title: M.D degree in Pediatrics
2. Minor/major element of the program: minor
3. Department offering the program: Pediatrics Department
4. Department offering the course: Medical Physiology Department
5. Academic year/level: First part
6. Date of specification approval: Faculty council No. "317", decree No. "1533" dated 17/12/2018

A. **Basic Information**

Title: Course Specifications of Medical Physiology for M.D degree in Paediatric
CODE: PHYS 0526-300

Total hours:

Title	Lectures	Practical	Total hours	Credit
Physiology	**45**	----------	**45**	**3**

B. Professional Information

1- <u>Course aims:</u>

The aim of this program is to provide the postgraduate with the advanced physiological knowledge and skills essential for the mastery of practice of Pediatric specialty and necessary to provide further training and practice in the field of pediatrics.

2- <u>Intended learning outcomes (ILOs):</u>

a) Knowledge and understanding :

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

a1. Mention the recent advances in physiology related to pediatrics.
a2. Describe mechanisms of fever
a3. Mention the physiology of vomiting & diarrhea.
a4. Describe normal & abnormal heart sounds.
a5. Mention Regulation of arterial blood pressure

b) Intellectual Skills:

By the end of the course the student should have the ability to:

b1. Identify pediatric problems and find solutions based on proper understanding of physiological basis .
b2. Have the ability to innovate nontraditional solutions to pediatric problems based on proper understanding of physiology .

c) Professional and Practical Skills:

By the end of the course the student should have the ability to:

c1. Evaluate and develop methods and tools existing in the area of pediatrics based on proper understanding of physiological basis.

c2. Design new methods, tools and ways of professional practice based on proper understanding of physiological basis.

d) General and Transferable Skills:

By the end of the course the student should have the ability to:

d1. Communicate effectively by different types of effective communication .

d2. Use appropriate computer programs and the internet to serve the development of professional practice.

d3. Assess himself and identify his personal learning needs.

d4. Use of different sources for information and knowledge.

3- Contents of the course

subject	Total number of hours	lectures	practical
I-Cardio-vascular system. -regulation of arterial blood pressure. -regulation of heart rate. -heart sounds.	6	6	
II-Respiration. hypoxia, cyanosis & regulation of respiration.	6	6	
III- Endocrine physiology. -thyroid, adrenal & pituitary.	6	6	
IV-Kidney. -mechanism of urine formation. -acid base balance.	3	3	
V-Blood . -types & functions of white blood cells. -R.B.Cs, erythropoiesis & anemia. -platelets, homeostasis & coagulation.	6	6	
VI-Digestion. -vomiting, deglutition, absorption & intestinal movements.	6	6	
VII-physiology of C.N.S. -pain.	6	6	
VIII-metabolism. -fever & its mechanism.	6	6	
Total **Total credit hours**	**45** **3**	**45** **3**	

4- Teaching Methods:

4.1. Lectures

4.2. Attending and participating in scientific conferences, workshops and thesis discussions, Computer search assignment (To acquire the general and transferable skills)

5- Methods of Students Assessment:

Method of assessment	The assessed ILOs
5.1- Observation of attendance and absenteeism.	- General transferable skills, intellectual skills
5.2-Written Exam: -Short essay: 40% -structured questions: 25% -MCQs: 20% -Commentary, Problem solving: 15%	 - Knowledge - Knowledge - Knowledge, intellectual skills - Intellectual skills, General transferable skills,
5.3 Computer search assignment	-General transferable skills, intellectual skills

Assessment Schedule

1- Assessment 1: written examination week 24
2- Assessment of attendance & absenteeism throughout the course, Computer search assignment.

Weighting of Assessments

Final-term written examination	100%
Total	100%

Formative only assessments: attendance and absenteeism, Computer search assignment

6- List of references:

6.1- **Essential books (textbooks)**

Guyton textbook of physiology.2010

6.2- **Recommended Books**

Ganong medical review of physiology.2009

6.3- **Periodicals, Web Sites, … etc**

American journal of physiology

Websites:

http://www.ncbi.nlm.gov/

www.Findarticle.com

www.Freemedicaljournals.com

7- Facilities Required for Teaching and Learning

1- Adequate infrastructure: Including teaching places, comfortable desks, good source of aeration, bathrooms, good illumination, safety and security tools.
2- Teaching tools: Including screens, computers, data show, projectors, flip charts, white boards, video player, digital video camera, scanner, copier, color and laser printer.

Course Coordinator: Dr/ Ahmed Mostafa

Head of Department: Dr/ Hoda Mostafa

Date: 18/12/2011, Revised:1/9/2012, Revised:1/12/2013, Revised:1/12/2018

Course Specifications of Pathology for M.D degree in Paediatrics

Sohag University **Faculty of Medicine**

1. Program Title: M.D degree in Pediatrics
2. Minor/major element of the program: minor
3. Department offering the program: Pediatrics Department
4. Department offering the course: pathology department
5. Academic year/level: First part
6. Date of specification approval: Faculty council No. "317", decree No. "1533" dated 17/12/2018

A- Basic Information

Title: Course Specifications of pathology for M.D degree in Paediatrics

CODE:PATH 0526-300

Total hours:

Title	Lectures	Practical	Total hours	Credit
Pathology	**45**	**--**	45	3

B- Professional Information

1. Course aims:

The aim of this program is to provide the postgraduate with the advanced pathological knowledge and skills essential for the mastery of practice of Pediatric specialty and necessary to provide further training and practice in the field of Pediatrics .

2. Intended learning outcomes (ILOs):

a) Knowledge and Understanding:

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

a1. Describe the recent advances in pathology of pediatric diseases.
a2. Mention basis of general and systemic pathology.
a3. List etiology, pathogenesis and pathologic manifestation of diseases.
a4. Correlate gross and histopathology with the clinical basis of diseases.
a5. Mention the fate and complications and prognosis of different diseases.

b) Intellectual Skills:

By the end of the course the student should have the ability to:

b1. Interpret data acquired through pathological examination reports to reach a diagnosis for pediatric problems.
b2. Identify pediatric problems and find solutions based on proper understanding of pathological basis
b3. Have the ability to innovate nontraditional solutions to pediatric problems based on proper understanding of pathology .

c) Professional and Practical Skills:

By the end of the course the student should have the ability to:

c1. Understands and evaluates pathological reports.

c2. Evaluate and develop methods and tools existing in the area of pediatrics based on proper understanding of pathological basis.
c3. Use diagnostic pathological methods to serve the professional practice in pediatric problems.
c4. Design new methods, tools and ways of professional practice based on proper understanding of pathology.

d) General and Transferable Skills:

By the end of the course the student should have the ability to:

d1. Communicate effectively by different types of effective communication.

d2. Use appropriate computer programs and the internet to serve the development of professional practice.

d3. Assess himself and identify his personal learning needs.

d4. Use of different sources for information and knowledge.

3. Contents of the course

Topic	No. of hours	Lecture	Practical
1- General Pathology: 1.1. Inflammation 1.2. Cell injury & apoptosis 1.3. Repair & healing 1.4. Circulatory disturbances 1.5. Immunopathology 1.6. Infectious diseases	10	10	
2- Pathology of Heart: 2.1. Congenital heart diseases 2.2. Endocarditis & rheumatic fever 2.3. Valvular heart diseases 2.4. Myocarditis & cardiomyopathy 2.5. Heart failure 2.6. Pericarditis & pericardial effusion	5	5	
3- Pathology of Respiratory system: 3.1. Bronchitis & bronchial asthma 3.2. Bronchiectasis & lung abscess 3.3. Pneumonias & empyema 1.4. Atelectasis & lung collapse 3.5. Pneumothorax & pleural effusion 3.6. Pulmonary hypertension	5	5	
4- Pathology of Gastrointestinal tract: 4.1. Gastroenteritis & dysentery 4.2. Malabsorption syndrome 4.3. Intestinal obsruction 4.4. Hepatitis 4.5. Jaundice & cholestasis	5	5	

5- Pathology of Kidney: 5.1. Glomeruonepheritis 5.2. Nephrotic syndrome 5.3. Pyeloneheritis 5.4. Hydronepherosis 5.5. Renal failure	5	5	
6- Pathology of Endocrine system: 6.1. Hyperthyroidism & hypothyroidism 6.2. Grave's disease & goiter 6.3. Adrenocortical hyperfunction 6.4. Adrenal insufficiency	4	4	
7- Pathology of Nervous system: 1.1. Hyderocephalus & aneurysms 1.2. Meningitis & encephalitis 1.3. Brain abscess	5	5	
8- Diseases of blood, lymph nodes, and spleen: 8.1. Leukemia & lymphoma 8.2. Hypersplenism & splenomegally	3	3	
9- Pathology of Bone: 9.1. Osteomyelitis 9.2. Artheritis	3	3	
Total	**45**	**45**	
Total credit hours	**3**	**3**	

4. Teaching Methods:

4.1. Lectures

4.2. Attending and participating in scientific conferences, workshops and thesis discussions, Computer search assignment (To acquire the general and transferable skills)

5. Methods of Students Assessment:

Method of assessment	The assessed ILOs
5.1- Observation of attendance and absenteeism.	- General transferable skills, intellectual skills
5.2-Written Exam: -Short essay: 40% -structured questions: 25% -MCQs: 20% -Commentary, Problem solving: 15%	 - Knowledge - Knowledge - Knowledge, intellectual skills - Intellectual skills, General transferable skills,
5.3 Computer search assignment	-General transferable skills, intellectual skills

Assessment Schedule

1- Assessment 1: written examination week 24

2- Assessment of attendance & absenteeism throughout the course, Computer search assignment.

Weighting of Assessments

Final-term written examination	100%
Total	100%

Formative only assessments: attendance and absenteeism, Computer search assignment

6. List of references:

6.1- Essential Books (Text Books):

- Muir's text book of pathology, 15th egition,2014
- Robbins pathologic basis of diseases, 10th edition, 2017

6.2- Recommended Books:

- Rosi &Ackerman text book of pathology, 11th edition, 2017
- Sternberg text book of pathology, 6th edition,2015

6.3- Periodicals, websites:

American journal of pathology
Pathology journal
Human pathology jounal
Web Sites: http://www.ncbi.nlm.nih.gov/pubmed/

7. Facilities Required for Teaching and Learning

1- Adequate infrastructure: Including teaching places, comfortable desks, good source of aeration, bathrooms, good illumination, safety and security tools.
2- Teaching tools: Including screens, computers, data show, projectors, flip charts, white boards, video player, digital video camera, scanner, copier, color and laser printer.

Course Coordinator: Dr: Eman Muhammad Salah El Deen

Head of Department: Dr: Afaf Al-Nashar

Date: 18/12/2011, Revised:1/9/2012, Revised:1/12/2013,Revised:1/12/2018

Course Specifications of Pediatrics for M.D degree in Paediatrics

Sohag University **Faculty of Medicine**

1. Program Title: M.D degree in Pediatrics
2. Minor/major element of the program: Major
3. Department offering the program: Pediatrics Department
4. Department offering the course: Pediatrics Department
5. Academic year/level: Second part
6. Date of specification approval: Faculty council No. "317", decree No. "1533" dated 17/12/2018

A- Basic Information

Title: Paediatrics for M.D degree in paediatrics
CODE:PED 0526-300
Total hours:

Title	Lectures	Tutorial/clinical	Total hours	Credit
Paediatrics	**420 hours**	**750**	**1170 hours**	**53**

B- Professional Information

1. Course aims:

The aim of this program is to provide the postgraduate with the advanced Pediatric knowledge and skills essential for the mastery of practice of Pediatric specialty and necessary to provide further training and practice in the field of Pediatrics.

2. Intended Learning Outcomes of Course (ILOs):

a) Knowledge and Understanding:

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

a1. Mention recent advances in pediatric diseases and their causation and pathophysiology .
a2. Describe recent advances in the diagnosis of pediatric diseases and their complications .
a3. Describe recent advances in the management of pediatric diseases.
a4. Mention recent advances in prevention of pediatric diseases.
a5. Mention recent advances in the care of term and preterm newborn babies
a6. Mention recent advances in evaluating normal and abnormal patterns of growth and development of infants and children .
a7. Explain recent advances in genetic diseases and ways of their diagnosis and the concepts of genetic counseling .
a8. Describe recent advances in the nutritional requirements of infants and children and nutritional abnormalities .
a9. Describe recent advances in methods of promoting health of infants and children .
a10. List The principles and fundamentals of quality of professional practice in the field of pediatrics.

a11. Mention the effect of professional practice on the environment and the methods of environmental development and maintenance.

b) Intellectual Skills

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

b1. Interpret data acquired through history taking to reach a provisional diagnosis for pediatric problems.
b2. Select from different diagnostic alternatives the ones that help reaching a final diagnosis for pediatric problems.
b3. Formulate scientific papers in the area of pediatrics.
b4. Assess Risk in professional practices in the field of pediatrics.
b5. Plan to improve performance in the field of pediatrics.
b6. Identify different pediatric problems and find solutions for them.
b7. Have the ability to innovate nontraditional solutions to pediatric problems .
b8. Manage Scientific discussion based on scientific evidences and proofs.
b9. Criticize researches related to pediatrics.

c) Professional and Practical Skills

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

c1. Master the basic and modern professional clinical skills in the area of pediatrics.
c2. Write and evaluate of medical reports.
c3. Evaluate and develop methods and tools existing in the area of pediatrics.
c4. Use diagnostic and therapeutic technological methods to serve the professional practice in pediatric problems.
c5. Train junior staff through continuous medical education programs.
c6. Design new methods, tools and ways of professional practice

d) General and Transferable Skills

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

d. 1 Communicate effectively by different types of effective communication.
d. 2 Use appropriate computer program packages and the internet to serve the development of professional practice
d. 3 Teach others and evaluate their performance.
d. 4 Assess him-self and identify his personal learning needs.
d. 5 Use different sources for information and knowledge.
d .6 Work coherently and successfully as a part of a team and as a team leader .
d.7 Manage Scientific meetings according to the available time.

3. Course Contents:

Topic	Total number of hours	Lectures	clinical
Neonatal medicine	65	25	40
Genetics	55	25	30
Growth & development	55	25	30
Pediatric emergency	55	25	30
Infectious diseases	55	25	30
Respiratory system	55	25	30
Cardiovascular system	55	25	30
Gastrointestinal system	55	25	30
Liver diseases	50	20	30
Nutrition	50	20	30
Urinary system	50	20	30
Blood	50	20	30
Tumors	50	20	30
Endocrinal system	45	20	25
Metabolic disorders	40	20	20
Nervous system	40	20	20
Immunological, allergic and rheumatic disorders	55	15	40
Bones	55	15	40
Skin	40	10	30
Community problems in pediatric practice in Egypt	20	5	15
Ethical aspects in pediatric practice	20	5	15
Methods and tools of continuous medical education	20	5	15
Evidence based medicine in pediatric practice	20	5	15
Critical appraisal of pediatric researches	20	5	15
Total	**1170**	**420**	**750**
Credit	**53**	**25**	**28**

4. Teaching Methods:

4.1. Lectures

4.2. Clinical lessons

4.3. Attending and participating in scientific conferences, workshops and thesis discussions. (To acquire the general and transferable skills)

5. Methods of Students Assessment:

Method of assessment	The assessed ILOs
5.1- Observation of attendance and absenteeism.	- General transferable skills, intellectual skills
5.2- Log book	- General transferable skills

5.3-Written Exam: -Short essay: 40% -structured questions: 25% -MCQs: 20% -Commentary, Problem solving: 15%	 - Knowledge - Knowledge - Knowledge, intellectual skills - Intellectual skills, General transferable skills,
5.4-Structured Oral Exam	- Knowledge, Iintellectual skills, General transferable skills
5.5-OSCE	-Practical skills, intellectual skills General transferable skills

Assessment Schedule

Assessment 1	logbook	Week: 80 - 92
Assessment 2	Final written exam	Week: 96 - 100
Assessment 3	Final OSCE	Week: 96 - 100
Assessment 4	Final Structured Oral Exams	Week: 96 - 100

Weighting of Assessments

Final-term written examination ……. separate exam

Passing in the written exam is a condition to attend the following exams:

Structured Oral Exam .	50 %
OSCE Examination	50 %
Total	100 %

formative only assessments :simple research assignment ,logbook ,attendance and absenteeism

6. List of References

6.1- Essential Books (Text Books)

Lecture notes prepared by the staff members in the department

6.2- Essential Books (Text Books)

1- Nelson essential of pediatrics, 2018

2- Current diagnosis and treatment of pediatrics, 2018

6.3- Recommended Books

1- Nelson textbook of pediatrics, 2018

2 – Forfar textbook of pediatrics, 2010

6.4- Periodicals, Web Sites, … etc

American journal of pediatrics

Archives of diseases of childhood

New England journal of medicine

Websites:

www.pediatrics.com

www.pediatriceducation.com

www.ncbi.nlm.gov

7. Facilities Required for Teaching and Learning

1- Adequate infrastructure: Including teaching places, comfortable desks, good source of aeration, bathrooms, good illumination, safety and security tools.

2- Teaching tools: Including screens, computers, data show, projectors, flip charts, white boards, video player, digital video camera, scanner, copier, color and laser printer.

Course Coordinator: Dr. Mustafa Ashry

Head of the Department: Prof. Mostafa Abo Sedara

Date: 18/12/2011, Revised:1/9/2012, Revised:1/12/2013, Revised:1/12/2018