Faculty of Medicine

Program Specification of MD degree in Tropical Medicine

Department: Tropical Medicine

Degree: MD degree **in Tropical Medicine**

Code: TM 100

A. Basic Information:

1-Program title: … MD degree in Tropical Medicine …

2-Final award: M D degree in Tropical Medicine

3-Programme type: **single**√ double multiple**:**

4-Responsible department: Tropical Medicine Department …

5-Departments involved in the program

Tropical Medicine Department

- Medical Physiology
- Pathology
- Public health and preventive medicine department……

6-Programme duration: ≥3.5 years

7-Number of program courses: 5
Five compulsory courses:

- GIT,Hepaology and Infectious diseases
- Physiology
- Medical statistics and research methodology.
- Use computer in medicine
- Pathology

8-Coordinator: **prof. Dr** Prof Dr Hala Ibrahem

9-External evaluator: Prof Dr Maysaa Abdalla**…**

10- Internal Evaluator: Prof Dr. Yasser mahrous

11-Course coordinator: Prof. Dr Hala Ibrahem

12- Program management team:

Dr Omar Abdelazeem
Dr. Alaa Mostafa
Ass. Lect..Gaser Elzaeem
Ass. Lec. Eman Salama

B- Professional information

1-Programme aims:

Graduate of Doctorate Degree in Tropical Medicine., the candidate should be able to:

1- Acquire excellent level of medical knowledge and apply such knowledge in practical skills and scientific research.

2-Acquire an in-depth understanding of common areas / problems and recent advances in the field of specialty, from basic clinical care to evidence based clinical application.

3- Create solutions for health problems related to GIT and liver diseases and infectious diseases.

4-Possess excellent level of a wide range of professional skills to manage independently all liver GIT problems and Infectious diseases problems.

5- Use recent technologies in diagnosis and treatment of GIT, liver diseases and Infectious diseases.

1- Intended Learning Outcomes (ILOs):

1.1 (a) Knowledge and understanding:

By the end of the study of doctorate program In Tropical Medicine the candidate should be able to:

A1- Enumerate recent advances in the common diagnostic and laboratory techniques necessary to establish diagnosis of hepatic and GIT diseases

A2- Describe recent advances in the various therapeutic methods/alternatives used for hepatic and GIT diseases.

A3- Explain the common diagnostic and laboratory techniques necessary to establish diagnosis of common illness.

A 4- Recognize basic principles of general and systemic pathology related to the GIT and hepatology system also infectious diseases.

A5-. Describe basics, different research methodology and ethical principles during conducting research in the field of hepatic and GIT diseases

A 6-. Demonstrate the advanced computer programs and biostatistics tests that would improve the research in the field of hepatic and GIT and infectious diseases.

A7- List Principles, methodologies, tools and ethics of scientific research.

A8-- Mention the principles and fundamentals of ethics and legal aspects of professional practice.

A9- Identify the principles of quality assurance of professional practice in the field of GIT and hepatology.

A10- Identify knowledge of established and evolving biomedical, clinical, epidemiological, and social-behavioral sciences, as well as the application of this knowledge to the care of patients with gastrointestinal, hepatic, infectious diseases and pancreaticobiliary diseases.

A11- Discuss the mutual relation between professional practice and the environment

1.2 (b) Intellectual skills

By the end of the study of doctorate program In Tropical Medicine the candidate should be able to:

B1-Interpret data acquired through history taking to reach a provisional diagnosis and select from different diagnostic alternatives the ones that help reaching a final diagnosis for hepatic and GIT problems

B2- Compare between different diagnostic alternatives the ones that help reaching a final diagnosis for hepatic and GIT problems

B3- Criticize research related to hepatology, infectious and Gastroenterology ……

B4-Create scientific papers around hepatology, gastroenterology and infectious diseases.

B5-Assess risk in professional practices in the field of hepatic,GIT and infectious diseases

B6- Adopt principles and fundamentals of quality assurance and formulate plans for the improvement of research and medical teaching process.

B7 -Make up different professional decisions suitable for different situations.

B8- Manage Scientific discussion based on scientific evidence and proofs.

B9- Interpret and judge data using evidence-based medicine …

1.3 Skills

1.3.1 (c) Professional and practical skills

By the end of the study of doctorate program In Tropical Medicine the candidate should be able to:

.C1-Apply the basic and modern professional skills in hepatology and Gastroenterology and infectious diseases

C2- Conduct a good medical history, a proper general examination regional examination of all body systems

C3- Categorize a clear priority plan in the patient's management

C4 Decide the indications for consulting higher levels or reference to other disciplines

C5 - Perform Therapeutic and diagnostic upper GIT endoscopy and colonoscopy.

C6- Evaluate of medical reports.

C7-Perform acquainted with special therapeutic and interventional techniques related to the specialty.

C8-. Recommend updated information on modern diagnostic tools within the specialty and precise methods, tools and ways of professional practice

C9- Evaluate and develop of methods and tools existing in the in hepatology, gastroenterology and infectious diseases.

C 10-Prepare junior staff through continuous medical education programs

1.3.2 (d) General and transferable skills

By the end of the study of doctorate program In Tropical Medicine the candidate should be able to

D1 Communicate with colleagues and interact with senior researchers and students to get the best possible advice, recommendations, and opinions.

D 2-Cooperate efficiently with others to respond to reports and professional opinions.

D 3- Adopt information technology (online courses, web sites, journals, and digital libraries) to accomplish duties in teaching and research.

D4 -Demonstrate effective undergraduate teaching.

D.5- Adjust his practice through constant self-evaluation and life-long learning.

D6 -Prepare and integrate scientific activities such as seminars, journal clubs, scientific meetings or conferences to achieve improvement of the professional practice through continuous and self-

learning.

D7-Adopt different information resources (print, analog), online (electronic, digital) text, audio-video, book and journal to address practical questions for maintaining professional growth.

D 8- Work as a member in larger teams and as well as a team leader.

D 9 - Maintain competences of leading scientific meeting and obtaining effective time management skills.

2-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 Decree No.6854, in its cession No.177 Dated: 18/5/2009) {Annex 1}.

• Minia faculty of medicine has developed the academic standards (ARS) for Medical Doctorate (MD) program and was approved in faculty Council decree No.7528, in its session No.191, dated: 15-3-2010), last update: 20-2-2023 {Annex I}.

• Then Tropical Medicine Department has developed the intended learning outcomes (ILOs) for doctorate (MD) program in Tropical Medicine and the Date of program specifications first approval was by department council: 13-5-2013, last update: 6-3-2023{Annex II}.

** Program External References

- No External reference (Benchmark).

3- program Structure and Contents

3.A. Program duration (≥3.5 years)

3 B. Program structure:

Topic	**Lecture hours/week**	**Practical/Clinical hours/week**	**Total No. of hours hours/week**
First part			
Medical statistics and research methodology	30	15	45
Use of computer in medicine	20	10	30
Pathology	24	24	48

Medical Physiology	48	--	
Second part			
Infectious diseases Hepatology Gastrointestinal diseases	33 28 24	13 20 10	46 48 34

Weight percentage (100%) of first part curriculum

- Medical statistics and research methodology: Percentage 25%
- Use computer in medicine: Percentage 25 %

Pathology: Percentage 25 %

Medical Physiology: Percentage 25 %

Weight percentage (100%) of second part curriculum: Percentage 100 %

3.C. Levels of program in credit hours system:

Not applicable

3.D. Program courses (curriculum)

Total No. of hours	No. of hours /week			Program ILOs Covered
	Lect.	Practical	Tutorial	
First part				
Medical statistics and research methodology	30	15		A5, 7 B3,4,6 D2,7
Use of computer in medicine	20	10		A6 D 2,3,7
Medical Physiology	48			A3 B 8 D 2
Pathology	24	24		A3,4 B 8 C8 D 2

Second part				
				A1,2,3,8,9,10,11
Infectious diseases.	33	13		B1,2.5.6,7,8,9
Hepatology	28	20		C1-10
Gastrointestinal disease	24	10		D1-9

4- program admission requirements:

1-Electronic enrolment to MD program is permitted twice/ year, in March and September.

2-Fees payment

• For candidates enrolled in the Ministry of Health or other agencies: 6230 EGP +

150 EGP for stamps and registration form.

• For the assistant lecturers in Minia University: 210 EGP for stamps and registration form.

3-Complying with the postgraduate regulatory rules of postgraduate studies at Minia faculty of medicine

4- Department's logbook that explains the training program, participation in various scientific activities, attending scientific conferences, and discussing university theses.

5- MBBCH degree from any Egyptian faculty of medicine or equivalent degree from medical schools abroad approved by the Ministry of Higher education.

6- Original master's degree in the subject of specialization from any universities in the Arab Republic of Egypt, or an equivalent degree from another scientific institute recognized by the university

5- Regulations for progression and program completion

Duration of program is ≥3.5 years), starting from registration till acceptance of the thesis; divided to:

First Part: (≥6 months from the date of registration):

• All courses as specified in the internal by law

•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. Those who fail in one curriculum need to re-exam it only.

Second Part: (≥24months):

• Program related specialized Courses.

• At least 24 months after passing the 1st part should pass before the student can ask for examination in the 2nd part. For both parts, fulfillment of the of logbook (Attendance, effective discussion in seminars, performance in practical lab and other activities). •

Two sets of exams: first in April— second in October.

- 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 re-attend the written exam.
- Fulfilment of the requirements in each course as described in the template registered in the logbook is a prerequisite for candidates to be assessed and undertake part 1 and part 2 exams: as following:
  a) Training courses
  b) Case presentation
  c) Seminars
  d) Workshops
  e) Conference attendance
  f) Journal club

Requirements for enrolment into first and second parts:

• Approval of the candidate's department to enroll for the doctoral exam.

. • Approval of the other departments in which the exam will be held to enroll for the exam.

• Department's logbook that explains the training program, participation in various scientific activities, attending scientific conferences, and theses' discussions.

. • In case of work break holidays, a back to work notice should be submitted 3 months before the exam.

Thesis/essay: (24-48 months)

- Could start after registration and should be completed, defended, and accepted after passing the second part final examination, and after passing of at least 24 months after documentation of the subject of the thesis.
- Accepting the thesis is enough to pass this part.
- Publication of 2 research papers with at least one published in international journal *(listed in WOS or/and*

Scopus, cite score ≥ 5, have ISSN) is required for thesis acceptance.

- Thesis discussion with approval is enough to pass this part.
- • The maximum duration for completion and approval of thesis is 4 years. Extension for a maximum of 8 years is allowed under certain conditions but this is subjected to the approvals of the supervisors, the dean and the university president.

• 6-Teaching and learning methods

Teaching and learning methods:	The assessed ILOs
lectures	A.Knowledge & understanding B. Intellectual Skills
practical training **Case presentations& case discussion** **In patient round**	B. Intellectual Skills C.Professional & Practical skills
Seminars	B.Intellectual Skills D. General & Transferable Skills
-Training courses & workshops.	C. Professional & Practical skills D. General & Transferable Skills
-Conference attendance	C. Professional & Practical skills D. General & Transferable Skills
Journal club	C. Professional & Practical skills D. General & Transferable Skills

7 -Methods of student assessment:

Method of assessment	The assessed ILOs
1. Written Exams: • Short assay (33.33%) • MCQ (33.33%) • Problem solving (33.33%)	A- Knowledge & understanding B- Intellectual skills
B- Practical Exams: OSCE Case discussion (long and short cases) XRAY, CT, MRI, ECG (Image analysis)	C-Professional and practical skills
C-Oral Exams	A- knowledge & understanding B- Intellectual skills C- General & Transferable Skills

8-Weighing of assessment:

It is mandatory to pass all the papers of written exams separately

Course	Written marks	Oral marks	Practical marks	Total marks
Medical statistics and research methodology	50	30	20	100
-- Use of computer in medicine	50	30	20	100
Physiology	50	30	20	100
Pathology	40	60	-	100
Infectious diseases. Hepatology Gastrointestinal disease	300	100	200	600

9-Evaluation of program intended learning outcomes:

Evaluator (By whom)	Method/tool	Sample
1. Senior students (Students of last year	Questionnaires	Attached to the file
2. Graduates (Alumni)	Questionnaires	Attached to the file
3. Stakeholders	Meeting Questionnaires	Attached to the file
4. External & Internal evaluators and external examiners	Reports	Attached to the file
5. Quality Assurance Unit	Reports Questionnaires Site visits	Attached to the file

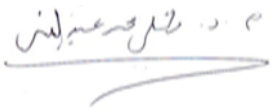
-**Course Coordinator**: **prof. Dr.** Hala Ibrahem

-Program management team:
Dr Omar Abdelazeem
Dr. Alaa Mostafa
Ass. Lect..Gaser Elzaeem
Ass. Lec. Eman Salama

Date of program specifications first approval by department council: 13/6/2013.

Date of last update & approval by department council: 5\ 3\ 2023.

Head of department: Prof. Dr. Wael Abelghany



Annex I: Comparison between General Academic Reference Standards (GARS) and Faculty Academic Reference Standards (ARS): (Including graduate Attributes)

برامج الد كتوراه NAQAAE	Faculty Doctorate (MD) Program
1. مواصفات الخريج: خريج برنامج الدكتوراه في أي تخصص يجب أن يكون قادرا على:	1. Graduate attributes: Graduate of doctorate (MD) program in any specialty should be able to:
1.1. إتقان أساسيات ومنهجيات البحث العلمي.	1.1. Mastery of basic research skills and types of study design.
1.2. العمل المستمر علي الإضافة للمعارف في مجال التخصص.	1.2. Contribute to development, application, and translation of new medical knowledge in his scholarly field through research.
1.3. تطبيق المنهج التحليلي والناقد للمعارف في مجال التخصص والمجالات ذات العلاقة.	1.3. use analytical and critical skills in observing, collecting and interpreting data.
1.4. دمج المعارف المتخصصة مع المعارف ذات العلاقة مستنبطا ومطورا للعلاقات البينية بينها.	1.4. Integrate biomedical sciences with clinical information to explore scientific basis of medical practice for improvement of management of diseases.
1.5. إظهار وعيا عميقا بالمشاكل الجارية والنظريات الحديثة في مجال التخصص.	1.5. Demonstrate an awareness of current health problems and recent theories in his scholarly field
1.6. تحديد المشكلات المهنية و إيجاد حلولا مبتكرة لحلها.	1.6. Identify and create solutions for occupational problems and medical malpractice conditions.
1.7. إتقان نطاقا واسعا من المهارات المهنية في مجال التخصص	1.7. perform a wide range of professional skills in his scholarly field.
1.8. التوجه نحو تطوير طرق و أدوات و أساليب جديدة للمزاولة المهنية.	1.8. Develop and improve new methods and approaches in the professional medical practice of the specific field.
1.9. استخدام الوسائل التكنولوجية المناسبة بما يخدم ممارسته المهنية	1.9. Use information technology to improve his professional medical practice including online medical information manage information and researches.
1.10. التواصل بفاعلية وقيادة فريق عمل في سياقات مهنية مختلفة.	1.10 communicate effectively as a member or leader of health care group or other professional group and gain leadership skills.
1.11.اتخاذ القرار في ظل المعلومات المتاحة.	1.11. Make informed decisions based on available data (e.g. patient information, up to date scientific evidence and clinical judgement).
1.12. توظيف الموارد المتاحة بكفاءة وتنميتها والعمل على إيجاد موارد جديدة .	1.12. Effective management, development & improvement of available resources and have the competency to get new resources.
1.13.الوعي بدوره في تنمية المجتمع و الحفاظ على البيئة.	1.13. Be aware of his community needs related to his field and have the ability to improve & maintain health care and carryout system-based improvement.
1.14.التصرف ب ما يعكس الالتزام بالنزاهة والمصداقية وقواعد المهنة.	1.14. Demonstrate ethical behavior, moral reasoning, honesty, integrity, dependability, and commitment to service and health equity.

15.1.الالتزام بالتنمية الذاتية المستمرة ونقل علمه و خبراته للآخرين.	1.15. Critically reflect on one's own performance to set learning and improving goals and sharing his knowledge.

2. المعايير القياسية العامة: **NAQAAE General Academic**	**2. Faculty Academic Reference Standards (ARS) for MD Program**
1.2. المعرفة والفهم: **بانتهاء دراسة برنامج الدكتوراه يجب أن يكون الخريج قادرا علي الفهم والدراية بكل من:**	**2.1. Knowledge and understanding:** Upon completion of the doctorate Program (MD), the graduate should have sufficient knowledge and understanding of:
1.1.2. النظريات والأساسيات والحديث من المعارف في مجال التخصص والمجالات ذات العلاقة	2.1.1. Theories, basics and updated knowledge in his scholarly field and related basic sciences.
2.1.2. أساسيات ومنهجيات وأخلاقيات البحث العلمي وأدواته المختلفة	2.1.2. Basic, methods and ethics of medical research.
3.1.2. المبادئ الأخلاقية والقانونية للممارسة المهنية في مجال التخصص	2.1. 3. Ethical and medicolegal principles of medical practice.
4.1.2. مبادئ وأساسيات الجودة في الممارسة المهنية في مجال التخصص	2.1. 4. Identify Principles and fundamental of quality in professional medical practice.
5.1.2. المعارف المتعلقة بآثار ممارسته المهنية على البيئة وطرق تنمية البيئة وصيانتها	2.1.5. Knowledge related to effects of professional practice on public health and methods of maintenance and system-based improvement of public health.
2.2. المهارات الذهنية: **بانتهاء دراسة برنامج الدكتوراه يجب أن يكون الخريج قادرا على:**	**2.2. Intellectual skills:** Upon completion of the doctorate program (MD), the graduate must be able to:
1.2.2.تحليل وتقييم المعلومات في مجال التخصص والقياس عليها والاستنباط منها	2.2.1 Analysis and evaluation of information to correlate and deduce from it.
2.2.2. حل المشاكل المتخصصة استنادا على المعطيات المتاحة	2.2.2. Problem solving skills based on analysis of available data for common health problems related to his scholarly field.
3.2.2. إجراء دراسات بحثية تضيف إلى المعارف	2.2.3. Carry out research projects related to his scholarly field.
4.2.2. صياغة أوراق علمية	2.2.4. Write and publish scientific papers.
5.2.2. تقييم المخاطر في الممارسات المهنية	2.2.5. Assess risk in professional medical practice.
6.2.2. التخطيط لتطوير الأداء في مجال التخصص	2.2.6. Establish goals, commitments and strategies for improved productivity and performance.
7.2.2. اتخاذ القرارات المهنية في سياقات مهنية مختلفة	2.2.7. Making professional decisions in different professional contexts.
8.2.2. الابتكار/ الإبداع	2.2.8. Demonstrate intellectual curiosity necessary for scientific discovery and innovation through active participation in research.
9.2.2. الحوار والنقاش المبني على البراهين والأدلة	2.2.9. Using Evidence-based strategies to during discussion or teaching others.
3.2. مهارات المهنية: **بانتهاء دراسة برنامج الدكتوراه يجب أن يكون الخريج قادرا على:**	**٢.3 Professional skills:** Upon completion of the doctorate program (MD), the graduate must be able to:

1.3.2. إتقان المهارات المهنية الأساسية والحديثة في مجال التخصص	٢.3.1 Master the basic as well as modern professional practical and/or clinical skills.
2.3.2 . كتابة وتقييم التقارير المهنية	2 .3.2 Write and evaluate professional reports.
2.3.3 . تقييم وتطوير الطرق والأدوات القائمة في مجال التخصص	2.3.3 Evaluate and improve the methods and tools in the specific field
4.3.2. استخدام الوسائل التكنولوجية بما يخدم الممارسة المهنية	2.3.4 use of technological means to serve Professional practice
2.3.5. التخطيط لتطوير الممارسة المهنية وتنمية أداء الآخرين.	2.3.5 Planning for the development of professional practice and improve of the performance of others

4.2. المهارات العامة والمنتقلة: **بانتهاء دراسة برنامج الدكتوراه يجب أن يكون الخريج قادرا على:**	**2.4. General and transferable skills** Upon completion of the doctorate program (MD), the graduate must be able to:
1.4.2. التواصل الفعال بأنواعه المختلفة	2.4.1. Communicate (in writing and orally) effectively and respectfully with peers, faculty, colleagues, and other members of the health care team, understanding the role of consultations and referrals.
2.4.2. استخدام تكنولوجيا المعلومات ب ما يخدم تطوير الممارسة المهنية	2.4.2. Use of information technology to serve Professional Practice Development.
3.4.2. تعليم الآخرين وتقييم أداءهم	2.4.3. Demonstrate effective teaching and evaluating others.
4.2.4. التقييم الذاتي والتعلم المستمر.	2.4.4. Self-assessment and continuous learning
5.4.2. استخدام المصادر المختلفة للحصول على المعلومات والمعارف.	2.4.5. use physical information resources (print, analog), online (electronic, digital,) text, audio-video, book and journal to address medical questions and knowledge to sustain professional growth
٢,٤,٦ فر يق و قيادة فرق العمل	Work as a member in larger teams and as well as a team leader knows how to develop "teaming strategy" to plan how people will act and work together
٢,٤,٧ اداره اللقاء ات العلمبهة و القدر ة علي ادارة الوفت	2.4.7. Manage of scientific meetings and the ability to manage Time effectively

Annex II: Matrix Between Faculty Academic Reference Standards (ARS) and Program ILOs for MD in Tropical medicine

2. Faculty Academic Reference Standards (ARS) for MD Program	MD program Tropical Medicine ILOs
2.1. Knowledge and understanding: Upon completion of the doctorate Program (MD), the graduate should have sufficient knowledge and understanding of:	**2.1. Knowledge and understanding:**
2.1.1. Theories, basics and updated knowledge in his scholarly field and related basic sciences.	A1- Enumerate recent advances in the common diagnostic and laboratory techniques necessary to establish diagnosis of hepatic and GIT diseases. A2- Describe recent advances in the various therapeutic methods/alternatives used for hepatic and GIT diseases. A3- Explain the common diagnostic and laboratory techniques necessary to establish diagnosis of common illness. A 4- Recognize basic principles of general and systemic pathology related to the GIT and hepatology system also infectious diseases.
2.1.2. Basic, methods and ethics of medical research.	A5-. Describe basics, different research methodology and ethical principles during conducting research in the field of hepatic and GIT diseases A 6-. Demonstrate the advanced computer programs and biostatistics tests that would improve the research in the field of hepatic and GIT and infectious diseases. A7- List Principles, methodologies, tools, and ethics of scientific research.
2.1. 3. Ethical and medicolegal principles of medical practice.	A8-- Mention the principles and fundamentals of ethics and legal aspects of professional practice.
2.1. 4. Identify Principles and fundamental of quality in professional medical practice.	A9- Identify the principles of quality assurance of professional practice in the field of GIT and hepatology
2.1.5. Knowledge related to effects of professional practice on public health and methods of maintenance and system-based improvement of public health.	A10- Identify knowledge of established and evolving biomedical, clinical, epidemiological, and social-behavioral sciences, as well as the application of this knowledge to the care of patients with gastrointestinal, hepatic, infectious diseases and pancreaticobiliary diseases. A11- Discuss the relation between professional practice and the environment
2.2. Intellectual skills: Upon completion of the doctorate program (MD), the graduate must be able to:	**2.2. Intellectual skills:**

2.2.1Analysis and evaluation of information to correlate and deduce from it.	B1-Interpret data acquired through history taking to reach a provisional diagnosis and select from different diagnostic alternatives the ones that help reaching a final diagnosis for hepatic and GIT problems
2.2.2. Problem solving skills based on analysis of available data for common health problems related to his scholarly field	B2- Compare between different diagnostic alternatives the ones that help reaching a final diagnosis for hepatic and GIT problems
2.2.3. Carryout research projects related to his scholarly field.	B3- Criticize research related to hepatology, infectious and oenterology
2.2.4. Write and publish scientific papers.	B4-Create scientific papers around hepatology, gastroenterology and infectious diseases.
2.2.5. Assess risk in professional medical practice.	B5-Assess risk in professional practices in the field of hepatic , GIT and infectious diseases
2.2.6. Establish goals, commitments and strategies for improved productivity and performance.	B6- Adopt principles and fundamentals of quality assurance and formulate plans for the improvement of research and medical teaching process.
2.2.7. Making professional decisions in different professional contexts.	B7 -Make up different professional decisions suitable for different situations
2.2.8. Demonstrate intellectual curiosity necessary for scientific discovery and innovation through active participation in research.	. B8- Manage Scientific discussion based on scientific evidence and proofs.
2.2.9. Using Evidence-based strategies to during discussion or teaching others.	B9- Interpret and judge data using evidence-based medicine …
2.3. Professional skills: Upon completion of the doctorate program (MD), the graduate must be able to:	**2.3. Professional skills:**
2.3.1. Master the basic as well as modern professional practical and/or clinical skills.	C1-Apply the basic and modern professional skills in hepatology and Gastroenterology and infectious diseases C2- Conduct a good medical history, a proper general examination regional examination of all body systems C3- Categorize a clear priority plan in the patient's management C4 Decide the indications for consulting higher levels or reference to other disciplines C5 - perform Therapeutic and diagnostic upper GIT endoscopy and colonoscopy.
2.3.2. Write and evaluate professional reports.	C6- Evaluate of medical reports.
2.3.3. Evaluate and improve the methods and tools in the specific field.	C7-Perform acquainted with special therapeutic and interventional techniques related to the specialty
2.3.4. use of technological means to serve Professional practice.	C8-Recommend updated information on modern diagnostic tools within the specialty and precise methods, tool and ways of professional practice

2.3.5. Planning for the development of professional practice and improve of the performance of others	C9- Evaluate and develop of methods and tools existing in the hepatology, gastroenterology and infectious diseases. C10-Prepare junior staff through continuous medical education programs
2.4. General and transferable skills Upon completion of the doctorate program (MD), the graduate must be able to:	**2.4. General and transferable skills**
2.4.1. Communicate (in writing and orally) effectively and respectfully with peers, faculty, colleagues, and other members of the health care team, understanding the role of consultations and referrals.	D1-Communicate with colleagues and interact with senior researchers and students to get the best possible advice, recommendations, and opinions. D 2- Cooperate efficiently with others to respond to reports and professional opinions.
2.4.2. Use of information technology to serve Professional Practice Development.	D3-Adopt information technology (online courses, web sites, journals and digital libraries) to accomplish duties in teaching and research.
2.4.3. Demonstrate effective teaching and evaluating others.	D 4 Demonstrate effective undergraduate teaching.
2.4.4. Self-assessment and continuous learning.	D5- Adjust his practice through constant self-evaluation and life-long learning. D 6 Prepare and integrate scientific activities such as seminars, journal clubs, scientific meeting or conferences to achieve improvement of the professional practice through continuous and self-learning.
2.4.5. use physical information resources (print, analog), online (electronic, digital,) text, audio-video, book and journal to address medical questions and knowledge to sustain professional growth.	D7- Adopt different information resources (print, analog), online (electronic, digital) text, audio-video, book and journal to address practical questions for maintaining professional growth.
2.4.6. Work as a member in larger teams and as well as a team leader knows how to develop "teaming strategy" to plan how people will act and work together.	D8- Work as a member in larger teams and as well as a team leader and maintain proper protocol in dealings with any conflict with and respect others' point of views.
2.4.7. Manage of scientific meetings and the ability to manage Time effectively.	D9- Maintain competences of leading scientific meeting and obtaining effective time management skills.

Annex III: Matrices

جامعة/أكاديمية : المنيا
كلية / معهد: الطب
قسم: الأمراض المتوطنة

Tropical Medicine	مسمى البرنامج
TM 100	كود البرنامج

1- Matrix of Coverage of Program MD ILOs by by courses

Courses (List of courses in 1st and 2nd parts)	Program Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding A	B. Intellectual Skills B	C. Professional & Practical skills C	D. General & Transferable Skills D
First part				
. Medical statistics and research methodology	A5,A7	B3,4,6		D2,7
Use of Computer in Medicine	A6			D2,3,7
Pathology	A3,4	B8	C8	D2
Medical Physiology	A3	B8		D2
Second part				
Infection Hepatology Gastrointestinal diseases	A1,2,3,8,9,9,10,11	B1,2,5,6,7,8,9	C1,2,3,4,5,6,7,8,9,10	D1,2,3,4,5,6, 7,8,9
Thesis	A5,6,7,8,10	B3,4,5,6,9	C1,7,9	D3,7,8

2- Matrix Coverage of MD Program ILOs by Methods of Teaching & Learning

Methods of Teaching & Learning	Program Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding **A**	**B. Intellectual Skills** **B**	**C. Professional & Practical skills** C	**D. General & Transferable Skills** D
Lecture	A1-11	6,7,8,9		
Practical -Case presentation and case discussion -In patient round	A1,2,8,9,11	B1,2,7,8,9	C2	
Seminars		B8,9		D6,7,8,9
Work shops			C7,8,9	D1,2,3,5,6,7,8,9
Conference Attendance			C8,9,10	D1,2,3,5,6,7,8,9
Journal club			C8,9,10	D1,2,3,5,6,7,8,9

3- Matrix of Coverage of Program ILOs by methods of assessment

Methods of Assessment	Intended Learning Outcomes (ILOs)			
	Knowledge & Understanding A	**Intellectual Skills B**	**Professional & Practical skills C**	**General & Transferable Skills D**
Written exam		B2		D5,7
Clinical&Practical exam OSCE Case discussion (long and short cases) XRAY,CT,MRI,ECG (Image analysis)		B1	C2	D5,7
Oral Exam	A1,2,3,4,5,6,7, 10			D5,7,8

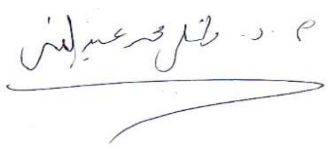
Course Coordinator:

Prof Dr / Hala Ibrahem

Date 5/3/2023

Head of Department:

DR/ Wael Abdelghany



1- Annex VI: Courses Specifications and Matrices

Course specification of: "Medical Statistics and Research Methodology"

In MD degree

University: Minia

Faculty: Medicine

Department offering the course: Public Health and Preventive Medicine

Department offering the programme: All Clinical and Academic Postgraduate MD Students

Programme(s) on which the course is given: First part MD for all postgraduates

Academic year/ Level: First part of MD

1. Course Information		
Academic Year/level: **First part MD**	Course Title: **Medical Statistics and Research Methodology**	Code: **CM 100**
Number of teaching hours: - **Lectures:** 30 hours - **Practical/clinical:** 15 hours - **Total:** 45 hours		
2. Overall Aims of the course	***By the end of the course the student must be able to:*** 1. Gain skills necessary for proper practice in the field of Research Methods including diagnostic, problem solving and decision making skills. 2. Apply ethical principles of scientific research with good awareness about patient´s rights. 3. Use precisely the research methodology in researches 4. Influence the students to adopt an analytical thinking for evidence-based medicine 5. Enable graduate students to use statistical principles to improve their professional work and develop the concept of critical interpretation of data 6. To use precisely computer programs SPSS, Epi Info and Excel in data analysis	
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 of research methodology . A.2. Describe the spectrum of research methodology . A.3. Explain tie strategies and design of research . A.4. Describe the study design, uses, and limitations . A.5. Explain evidence-based Medicine A.6. Define causation and association . A.7. Tell the principles and fundamentals of ethics. A.8. Describe the different sampling strategies A.9. Summarize the advantages and disadvantages of different sampling strategies A.10. Summarize different methods of samples size calculation A.11. Recognize the sources and the recent methods in data collection and analysis. A.12. Identify the types of variables A.13. Identify types of tabular and graphic presentation of data A.14. Describe the normal curves and its uses A.15. Identify the characters of normal distribution curve A.16. Identify measures of central tendency and measures of dispersion A.17. Explain regression analysis, its use and differentiate its types A.18. Define the screening tests pertinent to selected diseases and the at-risk approach in the application of screening tests A.19. Explain the usefulness of screening tests
B. Intellectual Skills	B.l. Apply research methods to different community health problems. B.2. Apply appropriate research strategies for use . B.3. Select appropriate research methods . B.4. Teach and advocate appropriately in the research design. B.5. Describe the normal curves B.6. Describe and summarize data B.7. Select the proper test of significance for a specific data. B.8. Interpret selected tests of significance and the inferences obtained from such tests
C. Professional and Practical Skills	C.1. Plan a research proposal for community diagnosis. C.2. Design questionnaires. C.3. Conduct research. C.4. Judge association and causation. C.5. Criticize for bias and confounding factors C.6. Design data entry file

	C.7. Validate data entry C.8. Manage data files C.9. Construct tables and graphs C.10. Calculate different samples sizes C.11. Calculate measures of central tendency and measures of dispersion C.12. Calculate sensitivity, specificity, and predictive values
D. General and transferable Skills	D.l. Lead a research team to conduct a specific study . D.2. Take part and work coherently with his associates to in research. D.3. Write scientific papers. D.4. Appraise scientific evidence D.5. Analyze and interpret data D.6. Use standard computer programs for statistical analysis effectively

4. Course Contents

Topic	No. of hours	Lecture	Tutorial/ Practical
Research methods			
Introduction : - Introduction to research. - Terminology and Rationale - Originality		3	
- Study design : -Cross sectional study and the prevalence rate -Cohort study, incidence rate, relative & attributable risk -Case-control study, Odd's ratio sampling -Experimental study and clinical trials		4	
- Sources of Errors in Medical Research **- Bias and confounding and its Control.**		3	
- Validity and reliability		2	
- The questionnaire design		2	
- Writing the Research Paper or Manuscript **- Protocol Writing**		2	2
- Critic technique for the literature review		2	2
- Association and causation		1	
- Evidence -based approach in medical practice		2	1
- Ethics of medical research		2	
Statistics			
Sampling		1	
Introduction to Sample Size Calculation		1	1
Data presentation		1	1
Tests of significance		2	
Introduction to SPSS		1	1
Proportion test			1
Chi-square test			1
Student T test, Paired T test			1
ANOVA test			1
Correlation (simple and multiple)			1
Regression			1
Screening		1	1
Total		**30**	**15**

5. Teaching and Learning Methods	**Due to COVID-19 pandemic, blended learning approach was adopted that mixes virtual face-to-face interaction activities with the online learning. 60% of study method is offline and 40% of study is online** **Online learning materials are available at Minia University site** ▪ Lectures: Face to face lectures, Pre-recorded video lectures ▪ Practical lessons ▪ Assignment ▪ Online quizzes
6. Teaching and Learning Methods for students with limited Capacity	• Outstanding student rewarded certificate of appreciation due to high level of achievement • Limited students divided into small group to make learning more effective
7. Student Assessment	
D. Student Assessment Methods	7.1- **Research assignment:** to assess general transferable skills, intellectual skills. 7.2- **Written exams:** • Short essay: to assess knowledge. • Commentary: to assess intellectual skills. 7.3- **Practical Exams:** to assess practical skills, intellectual skills. 7.4- **Oral Exams:** Oral exams to assess knowledge and understanding, attitude, communication 7.5- **Structured oral exams:** to assess knowledge.
E. Assessment Schedule (Timing of Each Method of Assessment)	Assessment 1: Final written exam week: 24-28 Assessment 2: Oral exam week: 24-28 Assessment 3: Practical exam week: 24-28
F. Weighting of Each Method of Assessment	- Final Written Examination 50 **%** - Oral Examination 30 **%** - Practical Examination 20% - Other types of assessment 0% - Total 100%
8- List of References	
A. Course Notes/handouts	- Department notes, lectures and handouts

B. Essential Books	- The Lancet Handbook of Essential Concepts in Clinical Research
C. Recommended Textbooks	***Research methods:*** - **Introducing Research Methodology**; A Beginner's Guide to Doing a Research Project - **Understanding Clinical Research**, Renato Lopes and Robert Harrington; ISBN-10: 0071746781 | ISBN-13: 978-0071746786 - **Users' guides to the medical literature: a manual for evidence-based clinical practice:** Guyatt, G., D. Rennie, M. Meade and D. Cook (2002), AMA press Chicago. - **Research Methods in Community Medicine:** Surveys, Epidemiological Research, Programme Evaluation, Clinical Trials, 6th Edition Joseph Abramson, Z. H. Abramson ***Computer:*** - Discovering statistics using IBM SPSS statistics, Field, A. (2013). sage. - Medical Statistics: A Guide to SPSS, Data Analysis and Critical Appraisal, Belinda Barton, Jennifer Peat - 2nd EditionEveritt, Brian S. - Medical statistics from A to Z: a guide for clinicians and medical students. Cambridge University Press, 2021. - Bowers, David. Medical statistics from scratch: an introduction for health professionals. John Wiley & Sons, 2019. - Aviva, P. (2005): Medical Statistics at a Glance, Blackwell Company, 2nd , ed., Philadelphia
D. Periodicals, websites	- https://phrp.nihtraining.com/users/login.php

	- http://www.jhsph.edu/ - Journal of Biomedical Education - https://lagunita.stanford.edu/courses/Medicine/MedStats-SP/SelfPaced/about?fbclid=IwAR3nfirLM4wnuEqgUjLjk8TCR7lzPdnpGqwin06L-GjFq32a62w3j6R5s9c

- **Course Coordinators:**
  - ➢ **Coordinator:**
    1) **Assistant Professor/** Ebtesam Esmail
    2) **Professor/** Eman Sameh
  - ➢ **Assistant-coordinators:**
    1) Ass. Lecturer/ Shaza Fadel
- **Head of Department**:

  Professor Dr. Nashwa Nabil Kamal

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

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

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
Introduction : - Introduction to research. - Terminology and Rationale - Originality		A.1, A.2,			
- Study design : -Cross sectional study and the prevalence rate -Cohort study, incidence rate, relative & attributable risk -Case-control study, Odd's ratio sampling -Experimental study and clinical trials		A.3, A.4,	B.l, B.2, B.3, B.4,	C.1,	
- Sources of Errors in Medical Research			B.3,	C.5	

- Bias and confounding and its Control.					
- Validity and reliability					
- The questionnaire design				C.2,	
- Writing the Research Paper or Manuscript **- Protocol Writing**			B.3,	C.3,	D.1, D.2, D.3
- Critic technique for the literature review					
- Association and causation		A.6,		C.4,	
- Evidence -based approach in medical practice		A.5,			
- Ethics of medical research		A.7			
Statistics					
Sampling		A.8, A.9, A.11			D.4
Introduction to Sample Size Calculation		A.10		C.10	D.4
Data presentation		A.13, A.14	B.6	C.9	D.4
Tests of significance		A.15, A16	B.5	C.11	D.4
Introduction to SPSS		A.12	B.6	C.6, C7, C8	D.5, D.6
Proportion test		A.11	B.7, B8		D.5, D.6
Chi-square test		A.11	B.7, B8		D.5, D.6
Student T test, Paired T test		A.11	B.7, B8		D.5, D.6
ANOVA test		A.11	B.7, B8		D.5, D.6
Correlation (simple and multiple)		A.11	B.7, B8		D.5, D.6
Regression		A.17	B.7, B8		D.5, D.6
Screening		A.18, A.19	B.7, B8	C.12	D.4

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	A.1, A.2, A.3, A.4, A.5, A.6, A.7 , A.8, A.14, A.15, A.16, A.18	B.4. B.5, B.6	C.1, C.4, C.11	D.3, D.4
Practical	A.9, A.10, A.11, A.12, A.13, A.16. A.17, A.18	B.1, B.2, B.3, B.4, B.6, B.7, B.8	C.3, C.5, C.6, C.7, C.8. C.9, C.10, C.12	D.2, D.4, D.5, D.6
Assignment	A.11, A.13, A.18	B.7, B.8	C.2, C.6, C.8, C.9, C.10, C.12	D.1, D.2., D.4, D.5, D.6

Matrix of Coverage of Course ILOs Methods of Assessment

	Intended Learning Outcomes (ILOs)

Methods of Assessment	A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
	A	B	C	D
Written exam	A.3, A.4, A.5, A.6, A.7, A.8, A.9, A.14, A.15, A16, A18	B.3, B.5,	C.1,	
Practical exam	A.10, A11, A.12, A13, A.15, A.16, A.17, A18	B.1, B.2, B.6, B.7, B.8	C.1, C.2, C.5, C.6, C.7,C.8, C.9, C.10, C.11, C.12	D.1, D.2, D.5, D.6

Test blueprint for Research methodology course

Topic	Hour	% of topic	Total No. of items	Written exam (100 marks)		Marks (percentages)	Modified marks (Percentages)
				Knowledge	Intellectual		
Research							
Introduction: - Introduction to research. - Terminology and Rationale - Originality	3	10%	5	4	1	7%	5%
- Study design	4	13.3%	8	3	5	17%	17%
- Sources of Errors in Medical Research - Bias and confounding and its Control.	3	10%	4	2	2	13%	10%
- Validity and reliability	2	6.67%	3	2	1	7%	5%
- The questionnaire design	2	6.67%	3	1	2	5%	5%
- Writing the Research Paper or Manuscript - Protocol Writing	2	6.67%	4	1	3	13%	10%
- Critic technique for the literature review	2	6.67%	2	1	1	7%	5%
- Association and causation	1	3.33%	3	2	1	7%	8%
- Evidence -based approach in medical practice	2	6.67%	1	1		3%	5%
- Ethics of medical research	2	6.67%	2	2		3%	6%
Statistics							
Sampling	1	3.33%	2	1	1	4%	4%
Introduction to Sample Size Calculation	1	3.33%	1	1		2%	2%
Data presentation	1	3.33%	3	2	1	5%	4%
Tests of significance	2	6.67%	2	1	1	8%	8%
Introduction to SPSS	1	3.33%	1	1		3%	3%
Screening	1	3.33%	2	1	1	3%	3%

Total	**30**	**100%**					**100%**

Course specification of :

"Use of Computer in Medicine" in MD degree

University: Minia

Faculty: Medicine

Department offering the course: Public Health and Preventive Medicine

Department offering the programme: All Clinical and Academic Postgraduate MD Students

Programme(s) on which the course is given: First part MD for all postgraduates

Academic year/ Level: First part of MD

1. Course Information		
Academic Year/level: **First part MD**	Course Title: **Use of Computer in Medicine**	Code: **CM 100**
• **Number of teaching hours:** - **Lectures:** 20 hours - **Practical/clinical:** 10 hours - **Total:** 30 hours		
2. Overall Aims of the course	***By the end of the course the student must be able to:*** 1. Recognize knowledge about the software and their applications in Medicine 2. Gain skills necessary for using and managing heath care information systems	
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 each part of computer hardware and its function A.2. Have a basic understanding of various computer applications in medicine - for instruction, information managing, and computer based medical record, etc. A.3. Define telemedicine and its importance A.4. Recognize importance of health information technology in improvement of healthcare A.5. Describe electronic medical records and obstacles facing it A.6. Identify the concept of big data analysis	
B. Intellectual Skills	B.1. Criticize adoption of telemedicine B.2. Discover factors constraining adoption of telemedicine	
C. Professional and Practical Skills	C.1. Design framework for understanding of health information system performance	
D. General and transferable Skills	D.1. Utilize computers in conducting research D.2. Appraise adoption of telemedicine D.3. Discover skills to carry out the process of improving health information system performance	

4. Course Contents			
Topic	**No. of hours**	**Lecture**	**Tutorial/ Practical**
Use of Computer in Medicine			
General concepts Introduction to Microsoft PowerPoint	6	4	2
Health Information Systems (HIS)	6	4	2
Telemedicine	6	4	2
Software Used in the Health Care	6	4	2
Big Data Analysis in Health	6	4	2
Total	**30**	**20**	**10**

5. Teaching and Learning Methods	**Due to COVID-19 pandemic, blended learning approach was adopted that mixes virtual face-to-face interaction activities with the online learning. 60% of study method is offline and 40% of study is online** **Online learning materials are available at Minia University site** ▪ Lectures: Face to face lectures, Pre-recorded video lectures ▪ Practical lessons ▪ Assignment ▪ Online quizzes
6. Teaching and Learning Methods for students with limited Capacity	• Outstanding student rewarded certificate of appreciation due to high level of achievement • Limited students divided into small group to make learning more effective
7. Student Assessment	
A. Student Assessment Methods	7.1- **Research assignment:** to assess general transferable skills, intellectual skills. 7.2- **Written exams:** • Short essay: to assess knowledge. • Commentary: to assess intellectual skills. 7.3- **Practical Exams:** to assess practical skills, intellectual skills. 7.4- **Oral Exams:** Oral exams to assess knowledge and understanding, attitude, communication 7.5- **Structured oral exams:** to assess knowledge.
B. Assessment Schedule (Timing of Each Method of Assessment)	Assessment 1: Final written exam week: 24-28 Assessment 2: Oral exam week: 24-28

	Assessment 3: Practical exam week: 24-28
C. Weighting of Each Method of Assessment	Final Written Examination 50 **%** Oral Examination 30 **%** Practical Examination 20% Other types of assessment 0% Total 100%
8. List of References	
A. Course Notes/handouts	Department notes, lectures and handouts
B. Essential Books	Essential Medical Statistics, Betty R. Kirkwood and J. A. Sterne (2000), 2nd edition
C. Recommended Textbooks	Data Management and Analytics for Medicine and Healthcare: Begoli, Edmon, Fusheng Wang, and Gang Luo. Springer, 2017.
D. Periodicals, websites	- National Institutes of Health: http://www.nih.gov - American Medical Informatics Association: http://www.amia.org/

- **Course Coordinators:**
  - ➢ **Coordinator:**
    3) Assistant Professor/ Ebtesam Esmail
    4) Professor/ Eman Sameh
  - ➢ **Assistant-coordinators:**
    1) Ass. Lecturer/ Shaza Fadel
- **Head of Department**:
  Professor Dr. Nashwa Nabil Kamal

Date of program specifications 1ˢ approval by department council: 13/5/2013

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
Use of Computer in Medicine					
General concepts Introduction to Microsoft PowerPoint		A.1, A.2,			D.1
Health Information Systems (HIS)		A.4, A.5		C1	D.3
Telemedicine		A.3	B.1, .2		D.2
Software Used in the Health Care		A.5, A.6			D.1
Big Data Analysis in Health		A.6			

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	A.1 to A.6	B.1,	C.1	
Practical	A.1,		C.1	D.1,D3
Assignment	A.4	B.2		D.2

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	A.1, to A.6	B.1		
Practical exam	A.4			D.1
Oral Exam	A.4, A..6	B.2	C.1	D.2, D.3

Test blueprint for Uses of computer in Medicine course

Test blueprint for Uses of computer in Medicine course **Topic**	**Hour**	**% of topic**	**Total No. of items**	**Written exam (100 marks)**		**Marks (Percentages)**	**Modified marks (Percentages)**
				Knowledge	**Intellectual**		
Use of Computer in Medicine							
General concepts Introduction to Microsoft PowerPoint	4	20%	6	4	2	30%	30%
Health Information Systems (HIS)	4	20%	4	4		20%	15%
Telemedicine	4	20%	6	2	4	25%	30%
Software Used in the Health Care	4	20%	5	4	1	20%	15%
Big Data Analysis in Health	4	20%	1	1		5%	10%
Total	20	100%	20			100%	100%

Course Specification of Pathology Doctorate Degree in Tropical Medicine

- **University:** Minia
- **Faculty:** Medicine
- **Program on which the course is given**: Doctorate Degree in Tropical Medicine
- **Major or minor element of program:** Pathology
- **Department offering the program:** Tropical Department
- **Department offering the course:** Department of Pathology
- **Academic year / Level:** First part
- **Date of specification approval:** Last date of approval: **17/2/2023**

[1]- Basic Information		
Academic Year/level: Postgraduate; 1st Part MD Tropical Medicine	**Course Title**: Course Specification of Pathology (MD Tropical Medicine)	**Code**:PA100
• **Number of teaching hours:** **Lectures:** Total of 24 hours; 1 hour/week **Practical:** Total of 24 hour; 1 hour/week		
[2]- Professional Information		
(I)- Overall aims of the course	1. Explain theories, basics & recent advances in the field of pathology. 2. Appraise & interpret relevant basic information and correlate them with essential clinical data to reach a final diagnosis. 3. Plan for the development of acquisition of skills of basic & modern pathological laboratory techniques as well as principals of anatomical pathology. 4. Demonstrate competency on dealing with various biopsies and anatomical pathology reports and correlate such information with the relevant provided clinical data. 5. Learn the basics of essential techniques and follow issues related to maintenance of safety and maintenance of available resources. 6. Communicate efficiently with senior staff, colleagues, lab technical staff, other health care professionals, students, and patients. 7. Use efficiently the information technology including data entry & analysis to enhance data management and to achieve improvement of the professional practice 8. Manage time efficiently and learn to priorities tasks. 9. Show the skills of continuous & self-learning.	
(II)- Intended learning outcomes of course (ILOs): **Upon completion of the course, the student should be able to:**		
(A)- Knowledge and understanding	A1: Identify the basics of anatomical, cytopathology, immunohistochemistry & molecular diagnostic technique. A2: Recognise the causes of cell injury and its consequences. A3: Identify the basics of general pathological features of inflammation. A4: Describe the process of tissue healing A5: Recognise infectious agents and bacterial infections A6: Describe in details granuloma pathogenesis, types, and pathology A7: Define mycobacterial infection A8: Recognise different forms of haemodynamic disorders and their underlying pathogenesis A9: Recognise the pathological aspects of neoplasms A10: Discuss different environmental diseases as tobacco smoking, alcohol consumption, occupational diseases, and exposure to irradiation, nutritional disorders, and obesity. A11: Define and discuss the main disease categories of the gastrointestinal tract. A12: Define and discuss the main disease categories of the hepatobiliary system and pancreas A13: Define and discuss the main disease categories of the haematopoietic and lymphopoietic systems	

(B)- Intellectual Skills	B1: Correlate & evaluate the gross and microscopic features of different disease process with available clinical data to provide a list of differential diagnosis for further advanced investigations to reach the correct diagnosis. B2: Evaluate and control efficiently potential risks that may arise during the professional practice in various clinical situations like handling and processing of specimens as well as during performing different essential laboratory techniques
(C)- Professional and Practical Skills	C1: Deal with anatomical pathology 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 biopsy preservation 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 D2: 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. D3: Develop skills of self-evaluation and identify personal learning needs to plan for self-development and continuous medical education D4: Demonstrate the skills of effective time management.

[3]- Course Contents

TOPIC	Contact hours		
	Lecture	Practical	Total
(A)- General Pathology			
[1]- Routine and special techniques in surgical pathology and the related safety & quality measures.	1	1	2
[2]- Handling of anatomical pathology specimens and the related safety & quality measures.	1	1	2
[3]- Cell injury and cell death	1	1	2
[4]- Inflammation	1	1	2
[5]- Tissue Repair	1	1	2
[6]- Acute bacterial infection viral infection, mycotic diseases, parasitic infestation	1	1	2
[7]- Tuberculosis	1	1	2
[8]- Hemodynamic disorders	1	1	2
[9]- Neoplasia	1	1	2
[10]- Environmental and nutritional diseases & ionising radiation	1	-	1
(B)- Systemic Pathology			
[4]- Diseases of the gastrointestinal tract.	6	7	13
[5]- Diseases of the hepatobiliary system and pancreas	4	4	8
[6]- Diseases of the haematopoietic and lymphopoietic systems	4	4	8
Total	24	24	48

[4]- Teaching and Learning Methods A- Straight lectures; power point presentations

B- Brain storming with the students
C- Questions and Answers

[5]- Teaching and learning methods to students with limited capacity: Not applicable

[6]- Student assessment

(A)- Student assessment methods	**Attendance criteria**: by faculty regulations (Activity logbook) **Assessment Tools:**

	{I}- Final Written exam: A- Short essay to assess knowledge and understanding B- Problem solving to assess intellectual skills C- MCQ to assess knowledge and intellectual skills {II}- Oral exam; to assess knowledge, understanding, intellectual skills, attitude, and communication.
(B)- Assessment schedule	1- Final Written exam 2- Oral exam
(C)- Weighting of assessment	1- Final Written exam 40% (Marks) 2- Oral exam 60% (Marks) Total 100% (Marks)

[7]- List of References

(A)- Course Notes/handouts	Lectures hand outs by staff members
(B)-Essential Books (textbooks)	Robbins Basic Pathology, 10th Edition (2018) By Kumar, Abbas, Aster.
(C)-Recommended Books	Differential Diagnosis in Surgical Pathology 2021
(D)-Periodicals	Modern Pathology Diagnostic Histopathology Cancer Annals of diagnostic pathology
(E)-Web sites	https://www.webpathology.com/index.asp https://www.pathologyoutlines.com/

[8]- Facilities required for teaching and learning

I- Classrooms for theoretical lectures and tutorials

II- Laboratories for practical

Course Coordinator: Professor Mariana Fathy Kamel

Head of Department: Professor Heba Mohamed Tawfik

(A)- The matrix of coverage of course ILOs by contents

Contents	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
(A)- General pathology	A1,2,3,4,5,6,7,8,9,10	B 1, 2	C 1, 2, 3	D 1, 2
[1]- Routine and special techniques in surgical pathology and the related safety & quality measures.				
[2]- Handling of anatomical pathology specimens and the related safety & quality measures.				
[3]- Cell injury and cell death				
[4]- Inflammation				
[5]- Tissue Repair				
[6]- Acute bacterial infection viral infection, mycotic diseases, parasitic infestation				
[7]- Tuberculosis				
[8]- Hemodynamic disorders				
[9]- Neoplasia				
[10]- Environmental and nutritional diseases & ionising radiation				
(B)- Systemic pathology				
[1]- Diseases of the gastrointestinal tract.	A11	B1,2	C 1, 2, 3	D 1, 2
[2]- Diseases of the hepatobiliary system and pancreas	A12			
[3]- Diseases of the haematopoietic and lymphopoietic systems	A13			

(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
Lecture	✓	✓	NA	NA
Practical	✓	✓	✓	✓
Presentation/seminar	NA	NA	✓	✓
Journal club	✓	✓	NA	✓
Training courses & workshops	✓	✓	✓	✓

(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
Written exam	✓	✓	NA	NA
Practical exam			✓	✓
Clinical exam	NA	NA	NA	NA
Oral Exam	✓	✓	✓	✓
Assignment	✓	✓	NA	NA
Structured oral exams	NA	NA	NA	NA

Blueprint of pathology course for Doctrac degree (1st part) Tropical Medicine

No	Topic	Contact Hours	ILOs	Weight %	Total Mark
(A)	**- General Pathology**				
[1]	- Routine and special techniques in surgical pathology and the related safety & quality measures.	1	A1	4.17	4
[2]	- Handling of anatomical pathology specimens and the related safety & quality measures.	1	A2	4.17	4
[3]	- Cell injury and cell death	1	A3	4.17	4
[4]	- Inflammation	1	A4	4.17	4
[5]	- Tissue Repair	1	A5	4.17	4
[6]	- Acute bacterial infection viral infection, mycotic diseases, parasitic infestation	1	A6	4.17	4
[7]	- Tuberculosis	1	A7	4.17	4
[8]	- Hemodynamic disorders	1	A8	4.17	4
[9]	- Neoplasia	1	A9	4.17	4
[10]	- Environmental and nutritional diseases & ionising radiation	1	A10	4.17	4
(B)	**- Systemic Pathology**				
[1]	- Diseases of the gastrointestinal tract.	6	A11	25	25
[2]	- Diseases of the hepatobiliary system and pancreas	4	A12	16.65	17.5
[3]	- Diseases of the haematopoietic and lymphopoietic systems	4	A13	16.65	17.5
	Total	**24**	**-**	**100%**	**100**

Course Specifications in Medical physiology in MD Degree in Tropical Medicine (TM 100)

University: Minia Faculty: Medicine

1. Program on which the course is given: Postgraduate study MD degree in tropical medicine
2. Major or minor element of program: Minor
3. Department offering the program: tropical medicine department
4. Department offering the course: Medical Physiology
5. Academic year / Level: first part
6. Date of specification approval: 6/3/2023

A-Basic information

Lectures:	Practical:	tutorial	Total:
24			24

Title: physiology

Title: physiology Credit Hours: not applicable

Lecture: (2 hour/week) Tutorial: --- Practical: ---- B-

Professional Information

1.Over all aim of the program

To prepare a tropical medicine physician oriented with the physiology of the G.I. & liver, autonomic nervous system, renal physiology in addition, graduates should have enough knowledge about the regulation of body fluids, electrolytes, water balance, body temperature & PH. They should have adequate information about different types of anemia, arterial blood pressure regulation, different types of shock, hypoxia, cyanosis pain sensation.

2. Intended Learning Outcomes of Courses (ILOs)

A) Knowledge and understanding.

By the end of this course, students should have adequate knowledge about:

A.1 Mention the recent advances in the normal function of the gastrointestinal system.

A.2 Explain the physiology of the autonomic nervous system

A.3 Discuss recent advances in the normal gastrointestinal motility

A.4 Mention the recent advances in the normal function of the liver

A.5 Explain recent advances in the regulation of body temp.

A.6 Define recent advances in normal gastrointestinal secretion.

A.7 Identify recent advances in the regulation of body fluids

A.8 Enumerate recent advances in the regulation of immune reaction

A.9 Discuss the physiology of pain

A.10 Discuss the physiology of different endocrine glands, their hormones and the mechanisms of regulation of their secretion.

A.11 Discuss the physiology of upper respiratory tract , hypoxia, cyanosis.

A.12 Discuss the physiology of arterial blood pressure & its regulation, cardiac output, shock, capillary circulation oedema.

A.13 Discuss the physiology of R.B. Cs, hemoglobin& anemia.

B) Intellectual Skills

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

B.1 Relate hepatic and GIT problems in the light of physiological base

B.2 Interpret problems in the body temperature in the light of physiological base

B.3 Correlate problems in the hematopoietic system light of physiological base.

C) Professional and Practical Skills:

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

C.1 Evaluate and develop methods and tools for assessment of liver and GIT physiology

D) General and Transferable Skills :

by the end of the course, the students are expected to be able to:

D.1 Use different sources for information and knowledge in the field of normal function of the liver and GIT

Course content

Topic	Lectures/2 hrs/w
1- Physiology of Hematological System (Blood)	4 hours
2- Physiology of Cardiovascular System (CVS)	4 hours
3- Physiology of Central Nervous System (CNS)	4 hours
4- Physiological basis of Metabolism	4 hours
5- Physiological basis of Endocrinal System	4 hours
6- Physiology of Upper Respiratory System	4 hours
7- Physiology of ANS System	4 hours
8- Physiology of GIT System	20 hours
Total hours	48

4. Teaching and Learning Methods

4.1. Lectures.

5. Student Assessment Methods

5.1. Written examination to assess knowledge & understanding.

5.2. Oral examination to assess understanding & attitude.

5.3. Observation of attendance and absenteeism.

6-Assessment Schedule

Assessment 1. Written examination

Assessment 2. Oral examination

Assessment 3. Attendance and absenteeism

7-Weighting of Assessments

Final-term Examination %: 50%

Oral Examination %: 30%

Attendance and absenteeism %: 20%

Total 100%

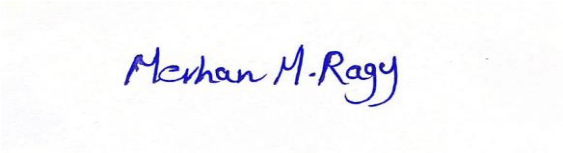
8-List of References

1- course notes: lectures notes prepared by the staff members in the department

2- Gyton textbook of physiology

Head of Department: Professor Dr. Merhan Mamdoh Ragy

Date: 6 / 3 / 2023



The matrix of the ILOs of physiology course

Contents	knowledge	Intellectual skills	Practical skills	General skills
Physiology of Hematological System (Blood)	A7, A8, A13	B3	-	-
Physiology of Cardiovascular System (CVS)	A12	B3	-	--
Physiology of Central Nervous System (CNS)	A9	-	-	-
Physiological basis of Metabolism	A5	B2	-	-
Physiological basis of Endocrinal System	A10	-	-	-
Physiology of Upper Respiratory System	A 11	-	-	-
Physiology of ANS System	A 2	-	-	-

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

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

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

Methods of Assessment	Intended Learning Outcomes (ILOs)			
	Knowledge & Understanding	Intellectual Skills	Professional & Practical skills	General & Transferable Skills
	K	I		T
Written exam	X	X	-	X
Oral Exam	X	X	-	X
Log Book	X	X	-	X

Course Coordinator,

Dr. Eman Elbassuoni
Professor of Medical Physiology
Faculty of Medicine, Minia University

Head of Department,

Prof. Dr. Merhan Mamdoh Ragy
Prof. & Head of Medical Physiology Department
Faculty of Medicine, Minia University

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

Blueprint of Physiology course for Doctorate degree (1st part) Tropical Medicine (TM100)

Topic	ILOs	Contact Hours	Knowledge %	Intellectual %	Weight %	Total Mark	Actual Mark
Physiology of Hematological System (Blood): general composition & functions of blood components. Clinical conditions resulting from abnormalities of blood components.	1	4	70	30	8.3	8.3	8
Physiology of Cardiovascular System (CVS): the factors affecting and regulation of arterial blood pressure (ABP).	2	4	70	30	8.3	8.3	8
Physiology of Central Nervous System (CNS): types, mechanism, body reactions and control mechanisms of Pain.	3	4	70	30	8.3	8.3	8
Physiological basis of Metabolism: regulatory mechanisms of body temperature & disorders.	4	4	70	30	8.3	8.3	8
Physiological basis of Endocrinal System: mechanisms of Ca^{+2} & Glucose homeostasis.	5	4	70	30	8.3	8.3	8
Physiology of Upper Respiratory System: Acid-base balance. different types of hypoxia, cyanosis and their effects on the body.	6	4	70	30	8.2	8.2	8
Physiology of ANS System: Distribution & functions of sympathetic and parasympathetic. Chemical transmission in ANS.	7	4	70	30	8.3	8.3	8
Physiology of GIT System	8	20	70	30	42	42	44
Total	-	**48**			**100%**	**100**	**100**

5- Course Specifications of Tropical Medicine (Second part) For MD Degree in Tropical Medicine

University: Minia Faculty: Medicine

Department: Tropical Medicine

1.Course Information
Course Title: Tropical Medicine **Code: TM 100** **Academic Year/level:** Postgraduate, M D degree (2nd part), Tropical. **Date of specification approval:** 2022/2023
• **Number of teaching hours:** **-**Lectures / hours : 33h. Infection, 28 h hepatology 24 h GIT **-Clinical: -**13 h. Infection, 20 h hepatology ,10h. GIT
2. **Overall Aims of the course**
Graduate of Doctorate Degree in Tropical Medicine., the candidate should be able to:. 1- Acquire excellent level of medical knowledge and apply such knowledge in practical skills and scientific research. 2-acquire an in-depth understanding of common areas / problems and recent advances in the field of specialty, from basic clinical care to evidence based clinical application. 3- Create solutions for health problems related to GIT and liver diseases and infectious diseases. 4-Possess excellent level of a wide range of professional skills to manage independently all liver GIT problems and Infectious diseases problems. 5- Use recent technologies in diagnosis and treatment of GIT, liver diseases and Infectious diseases.

3. **Intended learning outcomes of course (ILOs):** ***Upon completion of the course, the student should be able to:***	
A- Knowledge and Understanding	By the end of the study of doctorate program In Tropical Medicine the candidate should be able to: A1- Enumerate recent advances in the common diagnostic and laboratory techniques necessary to establish diagnosis of hepatic and GIT diseases A2- Describe recent advances in the various therapeutic methods/alternatives used for hepatic and GIT diseases. A3- Explain the common diagnostic and laboratory techniques necessary to establish diagnosis of common illness. A 4- Recognize basic principles of general and systemic pathology related to the GIT and hepatology system also infectious diseases. A5-. Describe basics, different research methodology and ethical principles during conducting research in the field of hepatic and GIT diseases A 6-. Demonstrate the advanced computer programs and biostatistics tests that would improve the research in the field of hepatic and GIT and infectious diseases. A7- List Principles, methodologies, tools and ethics of scientific research. A8-- Mention the principles and fundamentals of ethics and legal aspects of professional practice. A9- Identify the principles of quality assurance of professional practice in the field of GIT and hepatology. A10- Identify knowledge of established and evolving biomedical, clinical, epidemiological, and social-behavioral sciences, as well as the application of this knowledge to the care of patients with gastrointestinal, hepatic, infectious diseases and pancreaticobiliary diseases. A11- Discuss the mutual relation between professional practice and the environment
B- Intellectual Skills	By the end of the study of doctorate program In Tropical Medicine the candidate should be able to: B1-Interpret data acquired through history taking to reach a provisional diagnosis and select from different diagnostic alternatives the ones that help reaching a final diagnosis for hepatic and GIT problems

	B2- Compare between different diagnostic alternatives the ones that help reaching a final diagnosis for hepatic and GIT problems B3- Criticize research related to hepatology, infectious and Gastroenterology …… B4-Create scientific papers around hepatology, gastroenterology and infectious diseases. B5-Assess risk in professional practices in the field of hepatic,GIT and infectious diseases B6- Appraise principles and fundamentals of quality assurance and formulate plans for the improvement of research and medical teaching process. B7 -Decide different professional decisions suitable for different situations. B8- Manage Scientific discussion based on scientific evidence and proofs. .B9- Interpret and judge data using evidence-based medicine
C- Professional and Practical Skills	By the end of the study of doctorate program In Tropical Medicine the candidate should be able to: .C1-Apply the basic and modern professional skills in hepatology and Gastroenterology and infectious diseases C2- Conduct a good medical history, a proper general examination regional examination of all body systems C3- Categorize a clear priority plan in the patient's management C4 Recognize the indications for consulting higher levels or reference to other disciplines C5 - Perform Therapeutic and diagnostic upper GIT endoscopy and colonoscopy. C6- Evaluate of medical reports. C7-Perform acquainted with special therapeutic and interventional techniques related to the specialty. C8-. Recommend updated information on modern diagnostic tools within the specialty and precise methods, tools and ways of professional practice C9- Evaluate and develop of methods and tools existing in the in hepatology, gastroenterology and infectious diseases. C 10-Prepare junior staff through continuous medical education programs
D- General and transferable Skills	. By the end of the study of doctorate program In Tropical Medicine the candidate should be able to

	D1 Communicate with colleagues and interact with senior researchers and students to get the best possible advice, recommendations, and opinions. D 2-Cooperate efficiently with others to respond to reports and professional opinions. D 3- Adopt information technology (online courses, web sites, journals, and digital libraries) to accomplish duties in teaching and research. D4 -Demonstrate effective undergraduate teaching. D.5- Adjust his practice through constant self-evaluation and life-long learning. D6 -Prepare and integrate scientific activities such as seminars, journal clubs, scientific meetings or conferences to achieve improvement of the professional practice through continuous and self-learning D7-Adopt different information resources (print, analog), online (electronic, digital) text, audio-video, book and journal to address practical questions for maintaining professional growth. D 8- Work as a member in larger teams and as well as a team leader. D 9 - Maintain competences of leading scientific meeting and obtaining effective time management skills.

4-Course contents

Subject	Lecture hour/ week	Practical	Total
INFECTION			
Diagnosis of infectious diseases (clinical microbiology, immunodiagnosis, molecular techniques.	1		1
Emerging and re-emerging infections	1		1
Vaccine schedules	1		1
Anti microbial therapy	1		1
Bacterial infection	3	1	4
Sepsis	1	1	2
mycobacterial infection &non mycobacterial infection	1	1	2
Parasitic infection	1	1	2

Viral infection	3	1	4
Systemic Fungal infection	1	1	2
Opportunstic infection	1	1	2
Seually transmitted diseases	1		1
Protozoal infection	1	1	2
CNS infections	2	1	3
Respiratory infections	2	1	3
GIT infection	3	1	4
Fever of unknown origin	2	1	3
Heat disordes	1		1
Zoonotic infections	1		1
Methicillin-resistant Staphylococcus aureus (MRSA) colonization	1		1
Nosocomial infecton	2	1	3
Covid 19 typical and atypical presentation and complication	2		2
Total	33	13	46
HEPATOLOGY			
AlcoholicLiver Diseases	1	1	1
Acute Liver Failure	1	1	1
Immune mediated liver diseases	2	1	1
Covid 19 in hepatic patient	1	1	
Metabolic liver diseases	1	1	1
NASH- NAFLD	1	1	1
Drug-Induced and Toxic Liver Disease	1	1	1
liver disorders Iin children	1	1	1
Pregnancy-Specific c Liver Diseases.	1	1	1
Liver Cirrhosis (etiology, clinical picture, diagnosis and treatment	2	2	1
portal hypertension	1	1	1
ascites	2	2	1
Primary Tumors of the Liver and Intrahepatic Bile Ducts	1	1	1
Jaundice and cholestasis	2	1	2
Liver Transplantation	1		1
Biliary Infections	1	1	2
Total	28	20	48
GIT			
Gastro intestinal diseases			
Nutrition in Gastroenterology	١		
Investigations of GIT	2	2	4
Esophageal diseases Functional disorders Esophageal Infection Esophageal Motility disorders		2	8

GERD Esophageal Tumors Vascular diseases	6		
Gastric diseases Peptic Ulcer Disease Gastric motility disorders Gastric tumors Vascular diseases	4	2	6
Pancrease Pancreatitis Pancreatic Cancer Pancreatic Endocrine Tumors	4	2	6
Small and Large Intestine Functional disorders Malabsorption Inflammatory Intestinal diseases Diverticular Disease Colonic Polyps and Polyposis Syndromes Benign and malignant Neoplasms Vascular diseases	6	2	8
GIT manifestation of Covid 19	١		1
Total	24		10

5-Teaching and Learning Methods

1- Lectures

2-practical training (Case presentations &case discussion, In patient round)

3-Seminars

4-Training courses & workshops.

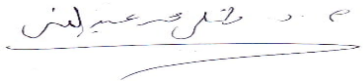
5-Conference attendance

6-Journal club

7-Student Assessment Methods	**Assessment 1:** Written exams: MCQ, case scenario, short essay and Commentary: - **Assessment 2:** Clinical Exams. (OSCE, Case discussion long and short case) **Assessment 3:** Oral exam, after the written exam
Assessment Schedule (Timing of Each Method of Assessment)	Exam are set twice a year April and September
Weighting of Each Method of Assessment	**Weighting of Assessments** Written exams :300(50%) Clinical Exams: 200 (33.3%) Oral exam : 100(16.6%)
8-List of References	1- course notes 2- Hunter's Tropical Medicine and Emerging Infectious Diseases.NINTH EDITION (2012) 3-Mandell, Douglas, and Bennett's:Infectious Disease ESSENTIALS (2017). 1- SHERLOCK'S DISEASES OF THE LIVER AND BILIARY SYSTEM (2018) 2- Zakim and Boyer's Hepatology: A Textbook of Liver Disease (Seventh Edition) – 2018 3- Yamada's Handbook of Gastroenterology FOURTH EDITION 2020

	.7-Periodicals, Web Sites, … etc http://www.ncbi.nlm.gov. http://www.emedicine http://Freemedicaljournals.com **For practical** -BAT E S' Pocket Guide to Physical Examination AND History Taking-2017.
Teaching and Learning Methods for students with limited Capacity Not applicable	

Head of Department:: Prof Dr / Wael Abdelghany



Date: 5/3/2023

Course coordinator: Prof.Dr. Hala Ibrahem

جامعة/أكاديمية المنيا.....

MD degree of Tropical Medicine	مسمى المقرر
TM 100	كود المقرر

كلية / معهد:الطب البشرى.....

قسم: ..الأمراض المتوطنة

1-Matrix of Coverage of Course ILOs By Contents

Subjects	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
	A	B	C	D
Diagnosis of infectious diseases (clinical, microbiology, immunodiagnosis	A1,A3	B2,B4,B5,B7,B9	C1.C8,C10	
Emerging and re-emerging infections	A1,A2 A,3, ,A8,A9,A1O,A11	B2,B4,B5,B7,B9	C1,C10	
Vaccine schedules	A2	B5 B7	C1,C7,C10	
Anti microbial therapy	A2			
Bacterial infection	A1,A2 A,3, ,A8,A9,A1O,A11	B2,B4,B5,B7,B9	C1,C2,C3,C4.,C6,C7,C8,C9, C10	D1,D2,D3,D5,D6,D7,D8,D9
Sepsis	A1,A2 A,3, , ,A8,A9,A1O,A11	B2,B4,B5,B7,B9	C1,C2,C3,C4.,C6,C7,C8,C9, C10	D1,D2,D3,D5,D6,D7,D8,D9
mycobacterial infection &non mycobacterial infection	A1,A2 A,3, , ,A8,A9,A1O,A11	B2,B4,B5,B7,B9	C1,C2,C3,C4.,C6,C7,C8,C9, C10	D1,D2,D3,D5,D6,D7,D8,D9
Parasitic infection	A1,A2 A,3, , ,A8,A9,A1O,A11	B2,B4,B5,B7,B9	C1,C2,C3,C4.,C6,C7,C8,C9, C10	D1,D2,D3,D5,D6,D7,D8,D9
Viral infection	A1,A2 A,3, , ,A8,A9,A1O,A11	B2,B4,B5,B7,B9	C1,C2,C3,C4.,C6,C7,C8,C9, C10	D1,D2,D3,D5,D6,D7,D8,D9
Systemic Fungal infection	A1,A2 A,3, , ,A8,A9,A1O,A11	B2,B4,B5,B7,B9	C1,C2,C3,C4.,C6,C7,C8,C9, C10	D1,D2,D3,D5,D6,D7,D8,D9
Opportunstic infection	A1,A2 A,3, , ,A8,A9,A1O,A11	B2,B4,B5,B7,B9	C1,C2,C3,C4.,C6,C7,C8,C9, C10	D1,D2,D3,D5,D6,D7,D8,D9
Sexually transmitted diseases	A1,A2 A,3, , ,A8,A9,A1O,A11	B2,B4,B5,B7,B9	C1,C2,C3,C4.,C6,C7,C8,C9, C10	D1,D2,D3,D5,D6,D7,D8,D9
Protozoal infection	A1,A2 A,3, , ,A8,A9,A1O,A11	B2,B4,B5,B7,B9	C1,C2,C3,C4.,C6,C7,C8,C9, C10	D1,D2,D3,D5,D6,D7,D8,D9
CNS infections	A1,A2 A,3, , ,A8,A9,A1O,A11	B2,B4,B5,B7,B9	C1,C2,C3,C4.,C6,C7,C8,C9, C10	D1,D2,D3,D5,D6,D7,D8,D9
Respiratory infections	A1,A2 A,3, , ,A8,A9,A1O,A11	B2,B4,B5,B7,B9	C1,C2,C3,C4.,C6,C7,C8,C9, C10	D1,D2,D3,D5,D6,D7,D8,D9
GIT infection	A1,A2 A,3, , ,A8,A9,A1O,A11	B2,B4,B5,B7,B9	C1,C2,C3,C4.,C6,C7,C8,C9, C10	D1,D2,D3,D5,D6,D7,D8,D9
Fever of unknown origin	A1,A2 A,3, , ,A8,A9,A1O,A11	B2,B4,B5,B7,B9	C1,C2,C3,C4.,C6,C7,C8,C9, C10	D1,D2,D3,D5,D6,D7,D8,D9
Heat disordes	A1,A2 A,3, , ,A8,A9,A1O,A11	B2,B4,B5,B7,B9	C1,C2,C3,C4.,C6,C7,C8,C9, C10	D1,D2,D3,D5,D6,D7,D8,D9
Zoonotic infections	A1,A2 A,3, , ,A8,A9,A1O,A11	B2,B4,B5,B7,B9	C1,C2,C3,C4.,C6,C7,C8,C9, C10	D1,D2,D3,D5,D6,D7,D8,D9
Methicillin-resistant Staphylococcus aureus (MRSA) colonization	A1,A2 A,3, , ,A8,A9,A1O,A11	B2,B4,B5,B7,B9	C1,C2,C3,C4.,C6,C7,C8,C9, C10	D1,D2,D3,D5,D6,D7,D8,D9
Nosocomial infection	A1,A2 A,3, , ,A8,A9,A1O,A11	B2,B4,B5,B7,B9	C1,C2,C3,C4.,C6,C7,C8,C9, C10	D1,D2,D3,D5,D6,D7,D8,D9
Covid 19 typical and atypical presentation and complication	A1,A2 A,3, , ,A8,A9,A1O,A11	B2,B4,B5,B7,B9	C1,C2,C3,C4.,C6,C7,C8,C9, C10	D1,D2,D3,D5,D6,D7,D8,D9
Investigations of liver disease(liver function tests, heptic imging and	A1	B2		

liver biopsy,radioisotopic studies)				
Approach to the Patient with Abnormal Liver Enzymes	A1	B1,B2		
Viral Infections by Hepatotropic and Nonhepatotropic Viruses	A1,A2 A,3, , ,A8,A9,A1O, A11	B2,B4,B5,B7,B9	C1,C2,C3,C4,C5	D1,D2,D3,D5,D6,D7,D8,D9
Non viral liver infection	A1,A2 A,3, , ,A8,A9,A1O,A11	B2,B4,B5,B7,B9	C1,C2,C3,C4,C6,C7,C8,C9,C10	D1,D2,D3,D5,D6,D7,D8,D9
Hepatobiliary Diseases in HIV-Infected Patients	A1,A2 A,3, , ,A8,A9,A1O,A11	B2,B4,B5,B7,B9	C1,C2,C3,C4,C6,C7,C8,C9,C10	D1,D2,D3,D5,D6,D7,D8,D9
AlcoholicLiver Diseases	A1,A2 A,3, , ,A8,A9,A1O,A11	B2,B4,B5,B7,B9	C1,C2,C3,C4,C6,C7,C8,C9,C10	D1,D2,D3,D5,D6,D7,D8,D9
Acute Liver Failure	A1,A2 A,3, , ,A8,A9,A1O,A11	B2,B4,B5,B7,B9	C1,C2,C3,C4,C6,C7,C8,C9,C10	D1,D2,D3,D5,D6,D7,D8,D9
Immune mediated liver diseases	A1,A2 A,3, , ,A8,A9,A1O,A11	B2,B4,B5,B7,B9	C1,C2,C3,C4,C6,C7,C8,C9,C10	D1,D2,D3,D5,D6,D7,D8,D9
Covid 19 in hepatic patient	A1,A2 A,3, , ,A8,A9,A1O,A11	B2,B4,B5,B7,B9	C1,C2,C3,C4,C6,C7,C8,C9,C10	D1,D2,D3,D5,D6,D7,D8,D9
Metabolic liver diseases	A1,A2 A,3, , ,A8,A9,A1O,A11	B2,B4,B5,B7,B9	C1,C2,C3,C4,C6,C7,C8,C9,C10	D1,D2,D3,D5,D6,D7,D8,D9
NASH- NAFLD	A1,A2 A,3, , ,A8,A9,A1O,A11	B2,B4,B5,B7,B9	C1,C2,C3,C4,C6,C7,C8,C9,C10	D1,D2,D3,D5,D6,D7,D8,D9
Drug-Induced and Toxic Liver Disease	A1,A2 A,3, , ,A8,A9,A1O,A11	B2,B4,B5,B7,B9	C1,C2,C3,C4,C6,C7,C8,C9,C10	D1,D2,D3,D5,D6,D7,D8,D9
liver disorders Iin children	A1,A2 A,3, , ,A8,A9,A1O,A11	B2,B4,B5,B7,B9	C1,C2,C3,C4,C6,C7,C8,C9,C10	D1,D2,D3,D5,D6,D7,D8,D9
Pregnancy-Specific c Liver Diseases.	A1,A2 A,3, , ,A8,A9,A1O,A11	B2,B4,B5,B7,B9	C1,C2,C3,C4,C6,C7,C8,C9,C10	D1,D2,D3,D5,D6,D7,D8,D9
Liver Cirrhosis (etiology, clinical picture, diagnosis and treatment	A1,A2 A,3, , ,A8,A9,A1O,A11	B2,B4,B5,B7,B9	C1,C2,C3,C4,C6,C7,C8,C9,C10	D1,D2,D3,D5,D6,D7,D8,D9
portal hypertension	A1,A2 A,3,A8,A9,A1O,A11	B2,B4,B5,B7,B9	C1,C2,C3,C4,C6,C7,C8,C9,C10	D1,D2,D3,D5,D6,D7,D8,D9
ascites	A1,A2 A,3A8,A9,A1O,A11	B2,B4,B5,B7,B9	C1,C2,C3,C4,C6,C7,C8,C9,C10	D1,D2,D3,D5,D6,D7,D8,D9
Primary Tumors of the Liver and Intrahepatic Bile Ducts	A1,A2 A,3,A8,A9,A1O,A11	B2,B4,B5,B7,B9	C1,C2,C3,C4,C6,C7,C8,C9,C10	D1,D2,D3,D5,D6,D7,D8,D9
Jaundice and cholestasis	A1,A2 A,3.A8,A9,A1O,A11	B2,B4,B5,B7,B9	C1,C2,C3,C4,C6,C7,C8,C9,C10	D1,D2,D3,D5,D6,D7,D8,D9
Liver Transplantation	A1,A2 A,3,A8,A9,A1O,A11	B5,B6,B7,B8,B9	C9,C10	D1,D2,D3,D5,D6,D7,D8,D9
Biliary Infections	A1,A2 A,3,A8,A9,A1O,A11	B2,B4,B5,B7,B9	C1,C2,C3,C4,C6,C7,C8,C9,C10	D1,D2,D3,D5,D6,D7,D8,D9
Nutrition in Gastroenterology	A1, A8,A9,A10,A11	B2,B4,B5,B7,B9	C 1, C 2, C 3, C 4,C6, C7,C8,C9,C10	D1,D2,D3,D5,D6,D7,D8,D9
Investigations of GIT	A1,A3	B 2, B 5		D1,D2,D3,D5,D6,D7,D8,D9
Esophageal diseases Functional disorders Esophageal Infection Esophageal Motility disorders GERD Esophageal Tumors Vascular diseases	A1,A2 A,3,A8,A9,A1O,A11	B2,B4,B5,B7,B9	C 1, C 2, C 3, C 4,C5 C6, C7,C8,C9,C10	D1,D2,D3,D5,D6,D7,D8,D9
Gastric diseases Peptic Ulcer Disease Gastric motility disorders Gastric tumors Vascular diseases	A1,A2 A,3,A8,A9,A1O,A11	B2,B4,B5,B7,B9	C 1, C 2, C 3, C 4,C5 C6, C7,C8,C9,C10	D1,D2,D3,D5,D6,D7,D8,D9
Pancrease	A1,A2 A,3,A8,A9,A1O,A11	B2,B4,B5,B7,B9	C 1, C 2, C 3, C 4,C5 C6, C7,C8,C9,C10	D1,D2,D3,D5,D6,D7,D8,D9

Pancreatitis Pancreatic Cancer Pancreatic Endocrine Tumors				
Small and Large Intestine Functional disorders Malabsorption Inflammatory Intestinal diseases Diverticular Disease Colonic Polyps and Polyposis Syndromes Benign and malignant Neoplasms Vascular diseases	A1,A2 A,3,A8,A9,A1O,A11	B2,B4,B5,B7,B9	C 1, C 2, C 3, C 4,C5 C6, C7,C8,C9,C10	D1,D2,D3,D5,D6,D7,D8,D9
GIT manifestation of Covid 19	A1,A2 A,3,A8,A9,A1O,A11	B2,B4,B5,B7,B9	C 1, C 2, C 3, C 4,C5 C6, C7,C8,C9,C10	D1,D2,D3,D5,D6,D7,D8,D9

2-Matrix of Coverage of ILOs by Methods of Teaching & Learning

3-

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	1,2,3,10	2	-	-
practical training (Case presentations &case discussion, In patient round)	3	1,2	C1,2,3,4	-
seminar	1,2	8,9	8,10	1,2,3,4,6,7,8,9
Training courses & workshops.		-	1,5,7,8,9,10	1,2,3,8
Conference attendance	-	8,9	8,9,10	1,2,3,8
Journal club	5,7	3,8,9	C1,2,3,4,5	1,2,3,4,7,8,9

Matrix of Coverage of Program ILOs by methods of assessment

Methods of Assessment	Intended Learning Outcomes (ILOs)			
	Knowledge & Understanding **A**	**Intellectual Skills** **B**	**Professional & Practical skills** **C**	**General & Transferable Skills** **D**
Written exam	1,2,3,10	1,2		
Clinical&Practical exam		1,2,7,9	2,3	
Oral Exam	A1,2,3,10			3,5,8

Blueprint Tropical medicine MD second part (300 marks)

Paper 1&2&3

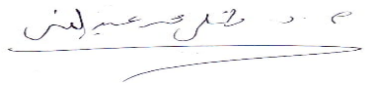
Subject	Hours	Knowledge %	Intellectual %	rks	Actual Marks
Infectious diseases					
• Diagnosis of infectious diseases	1	75	25	3.75	4
• Emerging and re-emerging infections	1	75	25	3.75	4
• Vaccine schedules	1	75	25	3.75	4
• Anti microbial therapy	1	75	25	3.75	4
• Bacterial infection	3	75	25	11.25	10
• Sepsis	1	75	25	3.75	4
• mycobacterial infection &non mycobacterial infection	1	75	25	3.75	4
• Parasitic infection	1	75	25	3.75	4
• Viral infection	3	75	25	11.25	10
• Systemic Fungal infection	1	75	25	3.75	4
• Opportunstic infection	1	75	25	3.75	4
• Seually transmitted diseases	1	75	25	3.75	4
• Protozoal infection	1	75	25	3.75	4
• CNS infections	2	75	25	7.5	8
• Respiratory infections	2	75	25	7.5	8
• GIT infection	3	75	25	11.25	10
• Fever of unknown origin	2	75	25	7.5	7
• Heat disordes	1	75	25	3.75	4

• Zoonotic infections	1	75	25	3.75	4
• Methicillin-resistant Staphylococcus aureus (MRSA) colonization	1	75	25	3.75	4
• Nosocomial infecton	2	75	25	7.5	7
• Covid 19 typical and atypical presentation and complication	1	75	25	3.75	4
HEPATOLOGY &GIT					
▪ Alcoholic Liver Diseases	1	75	25	3.75	4
▪ Acute Liver Failure	1	75	25	3.75	4
▪ Immune mediated liver diseases	2	75	25	7.5	7
▪ Metabolic liver diseases	2	75	25	7.5	7
▪ NASH- NAFLD	1	75	25	3.75	4
▪ Drug-Induced and Toxic Liver Disease	1	75	25	3.75	4
▪ liver disorders In children	2	75	25	7.5	7
▪ Pregnancy-Specific c Liver Diseases.	2	75	25	7.5	7
▪ Liver Cirrhosis (etiology, clinical picture, diagnosis and treatment	2	75	25	7.5	7
▪ portal hypertension	1	75	25	3.75	4
▪ ascites	2	75	25	7.5	7
▪ Primary Tumors of the Liver and Intrahepatic Bile Ducts	1	75	25	3.75	4
▪ Jaundice and cholestasis	2	75	25	7.5	8

▪ **Liver Transplantation**	**2**	**75**	**25**	**7.5**	**8**
▪ **Biliary Infections**	**1**	**75**	**25**	**3.75**	**4**
▪ **Covid 19 in hepatic patient**	**1**	**75**	**25**	**3.75**	**4**
Nutrition in Gastroenterology	١	**75**	**25**	**3.75**	**4**
Investigations of GIT	**2**	**75**	**25**	**7,5**	**7.5**
Esophageal diseases • **Functional disorders** • **Esophageal Infection** • **Esophageal Motility disorders** • **GERD** • **Esophageal Tumors** • **Vascular diseases**	**6**	**75**	**25**	**22.5**	**22.5**
Gastric diseases • **Peptic Ulcer Disease** • **Gastric motility disorders** • **Gastric tumors** • **Vascular diseases**	**4**	**75**	**25**	**15**	**15**
Pancreas • **Pancreatitis** • **Pancreatic Cancer** • **Pancreatic Endocrine Tumors**	**4**	**75**	٢٥	**15**	**15**
Small and Large Intestine • **Functional disorders** • **Malabsorption** • **Inflammatory Intestinal diseases** • **Diverticular Disease** • **Colonic Polyps and Polyposis Syndromes**	**6**	**75**	**25**	**22.5**	**22.5**

• **Benign and malignant Neoplasms Vascular diseases**					
GIT manifestation of Covid 19	١	**75**	**25**	**3.75**	**3.5**
Total	**80**			**300**	**300**

Head of Department:: Prof Dr / Wael Abdelghany



Date: 5/3/2023

Course coordinator: Prof.Dr. Hala Ibrahem

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

Methods of teaching & Learning	Intended Learning Outcomes (ILOs)			
	Kowledge&understanding A	Intellectual Skills B	Professional & practical skills C	General & transferable Skills D
Lecture	A1-9	B1-B11		
Practical			C1,C2,C3	D1,D2,D3,D4,D5,D6, D7,D8
Presentation/seminar Journal club	A1-A2-A3-A4-A5-A6-A7-A8-A9	B1,B2,B3,B4,B5,B6, B7,B8, B9	C1,C2,C3	D1,D2,D3,D4,D5,D6, D7,D8
Thesis discussion	A5,A6,A7,A8,A9	B3,B4,B9	-	D3,D7,D8

Matrix of Coverage of Program ILOs by methods of assessment

Methods of Assessment	Intended Learning Outcomes (ILOs)

	Knowledge & Understanding A	Intellectual Skills B	Professional & Practical skills C	General & Transferable Skills D
Written exam	A1,-9	B1,B2,B7		
Clinical& Practical exam			C1,C2,C3	
Oral Exam	A1,A2, A3,A4,A5, A6,A7,A8,A8, A10	B1,B2,B7		
LogbooK	A1,A2, A3,A4,A5, a6,A7,A8,A8, A10	B1,B2,B5	C1,C2,C3,C4,C5,C10	D6,D7,D8,D9

(A