



جامعة بنها كلية الطب البشرى قسم التخدير و العناية المركزة الجراحية

توصيف برنامج دكتوراة التخدير والعناية المركزة الجراحية (عام 2014-2013)

MD OF ANESTHSIA AND POST SURGICAL ICU

* معلومات أساسية : Basic information

1. - اسم البرنامج : دكتوراة التخدير و العناية المركزة الجراحية

MD OF ANESTHSIA AND POST SURGICAL ICU

Speciality: Anesthesia and post surgical ICU

٢ ـ طبيعة البرنامج: مشترك

٣- القسم المسئول عن البرنامج: قسم التخدير و العناية المركزة الجراحية

الأقسام المشاركة:

Physiology, Pharmacology, Anatomy, Community and Internal medicine departments.

٤- تاريخ إقرار البرنامج في مجلس القسم: 8 / 9 / 2013





٥- تاريخ إقرار البرنامج في مجلس الكلية: 15 / 9 / 2013

٦- مسؤل البرنامج: Prof.Dr: Ehab Ahmed Abdel Rahman

٧- المراجعة الداخلية للبرنامج: Prof.Dr: Mohammed Yousry

A- المراجعة الخارجية للبرنامج: (Aien Shams University)

Professional information

* معلومات متخصصة:

١ - الأهداف العامة للبرنامج:

1- Program aims:

The overall aims of the program are to:

- **1.1 Apply** the principles and methodologies of scientific research efficiently in anaesthesia and surgical intensive care.
- **1.2Continue** working to add data, researches and skills to the field of Anaesthesia and surgical intensive care and provide advanced scientific knowledge essential for anaesthesia and how can safely provide monitoring and restoration of homeostasis during the perioperative period as well as homeostasis in the critically ill patients.
- **1.3Analyze** and **criticize** researches and theories in the field of Anaesthesia and surgical intensive care and the related sciences including (anatomy, physiology, pharmacology, physics and statistics).
- **1.4Integrate** the science of Anaesthesia and surgical intensive care with (anatomy, physiology, pharmacology, physics and statistics)deducing and developing relations between them.





- **1.5Show** deep awareness of the ongoing problems and the recent visions and concepts in the field of Anaesthesia and surgical intensive care.
- **1.6 Identify** the Anaesthesiological problems and propose creative solutions.
- **1.7Perform** methods of supervision, teaching and evaluation of performance of both medical and paramedical personnel involved in anaesthesia, and critical care and wide the range of the Anaesthesia and surgical intensive care skills including (clinical management and teaching of cardiac and pulmonary resuscitation.
- **1.8Improve** the existing new tools, methods and techniques in the field of Anaesthesia and surgical intensive care and develop new ones.
- **1.9Apply** appropriate technological methods serving professional practice in Anaesthesia and surgical intensive care and different statistical technique and how to use it in field of anaesthesia .
 - 1.10 Maintain a lifelong learning competencies necessary for continuous professional development
 - **1.11 Communicate** effectively and lead a team work in different professional contexts.
 - **1.12 Use** the available data efficiently to make professional decisions in a wide range of Anaesthesia and surgical intensive care problems.
 - **1.13 Preserve** the available resources by using them in the best way and attempt to find new resources.
 - **1.14 Show** awareness of his/her role in community development and improvement and in environmental preservation in the light of the global and regional variables.
 - **1.15 Be** committed to the integrity and credibility of the profession and to the ethical rules of this sensitive specialty.

٢ - المخرجات التعليمية المستهدفة من البرنامج:

2-Intended Learning Outcomes (ILOS):





٢ ـ ا. ـ المعرفة والفهم:

2-a Knowledge and understanding

On successful completion of program, the graduate will be able to:

- **2.a.1 Understand** the basic theories and principles and the recent advances in Anaesthesia and surgical intensive care and the related sciences including anatomy, physiology, pharmacology, physics and statistics.
- **2.a2 Identify** the principles of anesthesia and clinical skills necessary for resuscitation and life support as practiced in critical care facilities
- **2.a.3** Know the basics, fundamentals, ethics and different tools of scientific research.
- **2.a.4 Realize** fundamentals of ethical & legal principles in practicing Anaesthesia and surgical intensive care and related sciences including (anatomy, physiology, pharmacology, physics and statistics).
- **2.a.5** Recognize the updates in the field of anesthesia
- **2.a.6 Identify** the principles that govern ethical decision making in clinical practice, the scope and impact of human rights law on persons and groups as well as the medico legal aspect of medical malpractice and common medical errors.
- **2.a.7 Understand** the basic principles of quality control in professional practice in the field of Anaesthesia and surgical intensive care
- **2.a.8 Realize** the effect of Anaesthesia and surgical intensive care practice on the environment and the methods of environmental development and maintenance.
- **2.a.9 Realize** the impact of Anaesthesia and surgical intensive care problems on quality of life, regarding health, social, psychological and financial conditions, fitness to work and personal relationships and on other family members and caretakers of the patient.





2.b. Intellectual Skills:

٢. ب_ القدرات الذهنية:

On successful completion of the program, the graduate will be able to:

- 2.b.1 *Analyse* information in the field of Anaesthesia and Surgical intensive care and the related sciences including (anatomy, physiology, pharmacology, physics and statistics).
 - **2.b.2** apply information in solving problems in anaesthesia and critical care and deducing from them.
 - **2.b.3 Solve** Anaesthetic problems based on the available data of patient.
- **2.2.4 construct** a list of initial anaesthesia plan and diagnostic hypothesis (differential diagnosis) for each problem with any shortage in information.
 - **2.b.5** Create a team composed of a number of specialists or residents at the same time with maximum safety.
- **2.b.6Interpret** patients symptoms and physical findings in terms of their anatomic, pathologic and functional diagnosis
 - **2.b.7 Analyse** patients data with relevance to his capabilities in the proper time or to transfer the patien to equipped center to deal with the anticipated problems.
 - **2.b.8 Conduct** a scientific research which adds to Anaesthesia and Surgical intensive care knowledge.
 - **2.b.9 Formulate** scientific papers about Anaesthesia and Surgical intensive care topics.
 - **2.b.10 Assess** risks in professional practices in the field of Anaesthesia and Surgical intensive care and determine the precautions to avoid those risks according to the appropriate understanding of risk assessment theories in Anaesthesia and intensive care.
 - **2.b.11 Develop** creative plans to improve performance and encourage evidence based learning and practice in the field of Anaesthesia and Surgical intensive care.





- **2.b.12 Make** professional decisions in diagnosis and management of Anaesthesia and Surgical intensive care cases.
- **2.b.13 Suggest** creative and innovative solutions to anaesthesiological and surgical intensive care problems in case of limited information.
- **2.b.14 Manage** Scientific discussion based on scientific evidences and proofs about Anaesthesia and Surgical intensive care topics .
- **2.b.15 Judge** researches related to Anaesthesia and Surgical intensive care.

٢.ج. مهارات مهنية وعملية

2.c. Practical and professional Skills:

On successful completion of the program, the graduate will be able to:

- **2.c.1 Perform** basic and advanced diagnostic and therapeutic procedures in the field of Anaesthesia and Surgical intensive care perfectly with satisfying outcomes.
- **2.c.2 Write** and appraise clinical and lab reports about Anaesthesia and Surgical intensive care cases.
- **2.c.3 Evaluate** and develop methods and tools existing in the area of Anaesthesia and Surgical intensive care.
- 2.c.4 Perform advanced techniques of general and regional anaesthesia
- **2.c.5 write** an articulate, legible, comprehensive yet concise consultation note with clear and informative report, including a precise diagnosis whenever possible, a differential diagnosis when appropriate, and recommended follow up or additional studies as appropriate.





- **2.c.6 Apply** direct communication to the referring physician or appropriate clinical person when interpretation of a laboratory assay reveals an urgent critical, or unexpected finding and document this communication in an appropriate manner
- **2.c.7 Use** information technology to optimize patient care and enhance his/her lifelong Anaesthesia and Surgical intensive care learning skills
- **2.c.8 Plan** to improve his/her performance in the field of Anaesthesia and Surgical intensive care and improve the performance of others.
- **2.c.9 Apply** sterile, safe techniques and infection control guidelines according to international principles in Anaesthesia and Surgical intensive care practice

۲ د. مهارات عامة و منتقلة:

2.d. General and transferable skills:-

By the end of the program, the graduate should be able to:

- **2.d.1 Communicate** effectively with patients, colleagues and staff using different methods. Use information technology to improve his/her Anaesthesia and Surgical intensive care practice
- **2.d.2 Share** his/her own scientific and clinical skills with his colleagues evaluate their performance and progress in Anaesthesia and Surgical intensive care
- **2.d.3 Analyze** his own practical experience in the field of Anaesthesia and Surgical intensive care to recognize his/her strengths, deficiencies, and limits in knowledge and expertise with continuous hard working to upgrade himself
- **2.d.4 Use** different sources of information (internet, library, lectures, attending conferences, scientific discussions,etc.) to acquire knowledge and to collect anaesthesiological and surgical intensive care data





- **2.d.5** Use the available time in smart manner
- **2.4.6 Apply** the principles of statistical methods for collection, presentation and analysis of all types of data.
- **2.d.7 Work** effectively and successfully as a teamwork member or leader to achieve a scientific goal related to the Anaesthesia and Surgical intensive care practice
- **2.d.8 Manage** and lead scientific symposium, and manage conversation and activities related to the field of Anaesthesia and Surgical intensive care and manage time effectively.
- **2.d.9 Respect** all patients irrespective of their socio-cultural or religious status in the Anaesthesia and Surgical intensive care practice.
- **2.d.10 Conduct** patient interview with patience, attentive listening and respect in the Anaesthesia and Surgical intensive care practice.
- **2.d.11 Handle** appropriately difficult Anaesthesia and Surgical intensive care situations such as conveying bad news or dealing with patient and family anger.

٣ ـ المعايير الأكاديمية للبرنامج:

3- Academic Standard

a. Academic Standard of MD Program of anesthesia and post surgical ICU approved in department council 2 June, 2013, and in faculty council no.(354) date 16 June, 2013 in which issued by the National Authority for Quality Assurance & Accreditation of Education are used. (ملحق ۱)





4. Reference standards

٤_ العلامات المرجعية:

ا-المعايير القياسية لبرامج الدراسات العليا (درجة الدكتوراة)الصادرة عن الهيئة القومية لجودة التعليم والإعتماد (مارس ٢٠٠٩)

A-Academic reference standards (ARS), MD Program (March 2009), which were issued by the National Authority for Quality Assurance & Accreditation of Education NAQAAE (ملحق)

5 - هيكل ومكونات البرنامج:

(5): Program structure and content

أ ـ مدة البرنامج : 60 weeks

- 1st part :6 month
- 2nd part :18 months
- Thesis: 6 months

ب ـ هيكل البرنامج:

- b. Program structure
- Total hours of program 60 hours credit hours
- Theoretical18 hours...credit hours.....
- Practical18 hours...credit hours.....
- **Thesis:** 15 credit hours
- **Logbook:** 10 credit hours

ج مستويات ومقرارات البرنامج





c-Compulsory:

1	_		-
الساعات	الكود	المقررات	البند
المعتمدة			
٦		علوم أساسية:	الجزء الأول
ساعات			
۱ ساعة	ANET 701	التشريح والفسيولوجيا التطبيقية	
۱ ساعة	ANET 702	علم العقاقير	
۲ ساعة	ANET 703	فيزياء وقياسات	
۲ ساعة	ANET 704	مبادئ الإحصاء الطبي والبحث العلمي	
۲ ٤		مواد التخصص ويشمل:	الجزء الثاني
ساعة			
١٢		تدريب إكلينيكي:	
ساعة			
١	ANET 705	تخدير الجراحات العامة والأورام	
١	ANET 706	تخدير الأطفال وحديثي الولادة	
١	ANET	تخدير أمراض النساء والتوليد	





	707		
١	ANET 708	تخدير جراحات العظام والعمود الفقري	
١	ANET 709	تخدير جراحات المخ والأعصاب	
١	ANET 710	تخدير جراحات الأنف والأذن والحنجرة	
١	ANET 712	تخدير جراحات ومناظير المسالك وزراعة	
		الكلي	
١	ANET 713	تخدير جراحات الشرايين	
١	ANET 714	تخدير جراحات المناظير	
١	ANET 715	تخدير جراحات الصدر والقلب المفتوح	
١	ANET 716	مبادئ علاج الآلام الحادة والمزمنة وآلام	
		الأورام	

ساعات	ANET 717	محاضرات نظرية والإجتماع العلمي الشهري	
	, 1,	للقسم	
۳ ساعات	ANET 718	ندوة الدوريات الحديثة Journal Club	
۳ ساعات	ANET 719	ندوة مخاطر ومضاعفات التخدير Morbidity & Mortality meeting	
۱۰ ساعات		 حضور المؤتمرات والندوات العلمية. 	كراسة





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		 حضور مناقشات رسائل ماجستیر 	الأنشطة
		ودكتوراه.	
		 المهارات المكتسبة أثناء التدريب 	
		الإكانيكي.	
٥ ساعات	ANET 720	الرعاية المركزة للحالات الحرجة بعد الجراحة	دورات
	720	والإصابات Surgical ICU	إختيارية:
	ANET 721	مناظير الألياف الضوئية للحنجرة والشعب	
	/21	Fiberoptic laryngo and Broncho الهوائية Scopy	
	ANET 722	رووي دراسة متقدمة في علاج الآلام	
	ANET 723	تطبيقات متقدمة في جراحات القلب المفتوح للبالغين والأطفال	
	ANET 724	مبادئ الموجات فوق الصوتية للقلب Basics of Transocsophageal Echocardiography	
	ANET 725	فسيولوجيا الأعصاب ورسم المخ EEG and Evoked Potentials	
	ANET 726	مبادئ الأشعة التشخيصية للصدر والمخ والعمود الفقرى المتعلقة بتخصيص التخدير	
		والرعاية المركزة	





١٥ ساعة		الرسالة
٦٠ ساعة		الإجمالي

تم اعتماد إجراءات تصحيحية لللائحة في مجلس قسم ٢٠١٣/٦/١٦:

- دمج المقررارات العلمية المدكورة ببرنامج التخدير الخاص بالدكتوراة جزء ثانى ووضعها في مقرر واحد لة كود جديد(705)ANETعلما بأن المواضيع هي تحت عنوان مقرر التخدير و العناية المركزة الجراحية.
 - أكواد هدة المقرارات هي:-ANET(705)-ANET(706)-ANET(707)-ANET(708)-ANET(709)-ANET(710)-ANET(710)-ANET(713)-ANET(715)-ANET(716)-ANET(720)-ANET(721)-ANET(722)-ANET(723)-ANET(724)-ANET(725)-ANET(726)
 - كما تم الغاء(ANET(714)-ANET(717)-ANET(718)-ANET(719) وتم اضافة الواضيع التي تشملها الي كراسة الانشطة

First part (15 weeks duration/6months)

a – Compulsory courses:

Course Code	Course Title	NO. of hours per	Total teaching	
				hours
		Theoretical	practical	





ANET 701	Applied Anatomy& physiology	1	-	15
ANET 702	Phamacology	1	-	15
ANET 703	Physics	2	-	30
ANET 704	Statistics	2	-	30
Total.				90

- b- Elective courses: none
- c- Selective courses: none





Second part (45 weeks duration/18 months)

• Compulsory courses:

Course Code	Course Title	code	No.or	f hours per week	
			Thoeritical	Practical	
التخدير و	تخدير الجراحات العامة و الاورام	ANET (705)	0.5	0.5	
العناية المركزة الجراحية	تخدير الإطفال و حديثى الولادة	ANET (706)	0.5	0.5	
ANET (705)	تخدير امراض النساء والولادة	ANET (707)	0.5	0.5	
	تخدير جراحات العظام و العمود الفقرى	ANET (708)	0.5	0.5	
	تخدير جراحات المخ و الاعصاب	ANET (709)	0.5	0.5	
	تخدير جراحات الانف و الاان و الحنجرة	ANET (710)	0.5	0.5	
	تخدير جراحات و مناظير المسالك و	ANET			





زراعة الكلى	(712)	0.5	0.5	
تخدير جراحات الشرايين				
تحدیر جربحات السرایین	ANET (713)	0.5	0.5	
تخدير جراحات المناظير	ANET (714)	0.5	0.5	
تخدير جراحات الصدر و القلب		0.0	0.0	
المفتوح	ANET (715)	0.5	0.5	
مبادىء علاج الالام الحادة والمزمنة والام الاورام	ANET (716)			
الرعاية المركزة للحالات الحرجة بعد	ANET (720)	0.5	0.5	
الجراحة و الإصابات	(120)	0.5	0.5	
مناظير الالياف الضوئية للحنجرة و الشعب الهوائية	ANET (721)	0.5	0.5	
2.34 . +				
دراسة متقدمة في علاج الإللام	ANET (722)	0.5	0.5	
تطبيقات متقدمة في جراحات القلب	ANIE			
المفتوح للبالغين و الاطفال	ANET (723)	0.5	0.5	
مبادىء الموجات فوق الصوتية	ANET			





	للقلب	(724)	0.5	0.5	
	فسيولوجيا الاعصاب و رسم المخ	ANET (725)	0.5	0.5	
	مبادىء الاشعة التشخيصية للصدر و المخ و العمود الفقرى المتعلقة بتخصص التخدير و العناية المركزة	ANET (726)	0.5	0.5	
TOTAL TEACHING HOURS/3 SEMISTERS			270 HOURS	810 HOUR S	1080 HOURS

- Elective courses: none
- Selective courses: none





٦- محتويات المقرات (راجع توصيف المقررات) (ملحق ٦)

1. كود أو رقم المقرر : ANET 701

اسم المقرر: التشريح والفسيولوجيا التطبيقية

٢. كود أو رقم المقرر : ANET 702

اسم المقرر: علم العقاقير

٣. كود أو رقم المقرر : ANET 703

اسم المقرر: الفيزياء و القياسات

٤. كود أو رقم المقرر : ANET 704

اسم المقرر: مبادىء اللحصاء الطبى و البحث العلمى

٥. كود أو رقم المقرر : ANET 705

اسم المقرر :مقرر علمي و عملي في التخدير و العناية المركزة الجراحية

المحتويات: (طبقاً لما هو مذكور في اللائحة)





٧- متطلبات الإلتحاق بالبرنامج:

7- Program admission requirements:

مادة (١): يشترط لقيد الطالب لدرجة الدكتوراه في الطب أو الجراحة أو العلوم الطبية الأساسية أن يكون حاصلا على درجة الماجستير في التخدير بتقدير جيد على الأقل من إحدى جامعات ج.م.ع أو على درجة معادلة لها من معهد علمي أخر معترف به من الجامعة

مادة (٢): يشترط في الطالب لنيل درجة الدكتوراه ما يلى:

- حضور المقررات الدراسية بصفة مرضية طبقا للساعات المعتمدة .
- أن يقوم ببحث في موضوع تقره الجامعة بعد موافقة مجلس الكلية والقسم لمدة سنتان على الأقل.
 - أن يتقدم بنتائج البحث في رسالة تقبلها لجنة الحكم بعد مناقشة علنية للرسالة .
- اجتياز الطالب ثلاث دورات في الحاسب الآلي (دورة في مقدمة الحاسب الألي دورة تدريبية " متوسطة " دورة في تطبيقات الحاسب الألي) وذلك قبل مناقشة الرسالة.
 - اجتياز الطالب اختبار التويفل بمستوى لا يقل عن ٥٠٠ وحدة وذلك قبل مناقشة الرسالة .

أن يجتاز بنجاح الاختبارات التحريرية والإكلينيكية والشفهية المقررة وفقا لما هو مبين باللائحة

مادة (3): على الطالب أن يقيد اسمه للامتحان قبل موعده بشهر على الأقل.





مادة (4): يشترط لنجاح الطالب فى امتحان الدكتوراه الحصول على الحد الأدنى للنجاح فى جميع الاختبارات المقررة وفى كل جزء من أجزاءها على حدة ذلك بأخذ المتوسط لتقديرات أعضاء اللجنة اذا رسب الطالب فى أى مقرر من المقررات يعيد الامتحان فى جميع المقررات.

٨ - القواعد المنظمة لإستكمال البرنامج :

8-Regulations for progression and program completion:

مادة (٦): تتولى لجنة الدراسات العليا بالكلية عن طريق لجنة تشكل لكل تخصص من أعضاء مجلس القسم التابع له المادة والقسم المانح للدرجة وضع البرنامج التفصيلي للمقررات في حدود الساعات المعتمدة الواردة باللائحة وعند الاختلاف يتم الاسترشاد بمقررات جامعة القاهرة ومقررات الشهادات العالمية الاوربية والامريكية يعتمدها مجالس الأقسام ثم يقرها مجلس الكلية وتشمل هذه الساعات محاضرات نظرية ودروس عملية وتدريب اكلينيكي ومحاضرات وندوات مشتركة.





٩ طرق و قواعد تقييم الملتحقين بالبرنامج:

9- Students Assessment methods:

مخرجات التعلم المستهدفة	الوسيلة	٩
To assess knowledge&understanding & intellectual skills. From2.a.1 to 2.a.9 and from 2.b.1 to 2.b.15	Written examination	1
To assess knowledge,under standing, intellectual skillsl, General & transferable skills From2.a.1 to 2.a.9 and from 2.b.1 to 2.b.15 and from 2.d.1 to 2.d.11	Oral examination	2
To assess knowledge and understanding, intellectual skills, practical and clinical skills and general and transferable skills. From 2.a.1 to 2.a.9 and from 2.b.1 to 2.b.15 and from 2.c.1 to 2.c.9 and 2.a 1 to 2.a.9 and from 2.d.1 to 2.d.11	Practical & clinical examination	3





Final exam.

First part

.11. 1		ارجة	_ 11		.1 111	11
لجمالي	وكيبياكإ	ريلمذ	ৰ্থিকয়য়	تعريري	الاحتبار	المهرر
200			100	100	احتبار تحريري محته ثلابه ساعابه	التشريح
200			100	100	+ اختبار هغمي	الغسيولوجي
200			100	100	احتبار تعریدی محته ثلایه ساعایه + احتبار هغمی	الغارمكولوجي
200			100	100	احتبار تدریری محته ثلایه ساعایه + احتبار هغمی	فيزياء وقياسات
200			100	100	اختبار تحریری محته ثلایه ساعایه + اختبار هغمی	مواحئ؛ الإمصاء الطوبي، والبحث العلمي،
1000	درجة	إجمالي الـ				





Second part

417.1		درجة	_ 1l		الاحتوار		
لجمالي	ريامد	الحلينيكي	বিষয়	تعريري	Jugar	المجرر	
				100	اختباران تحريريان محة كلا منعما ثلابه		
350		25	75	100	ساغاته + احتبار تحریری مدته ساغة وندخه احالة + احتبار هغوی و	التحدير والعناية المراحية	
500				50	اكلينيكى		
350	ربة	إجمالي الد					





١٠ طرق تقويم البرنامج:

10- Evaluation of Program:

Evaluator	Tools	Signature
Internal evaluator (s)	Focus group discussion	ا.د/عدمد يسري
مقییم داخلی	Meetings	
External Evaluator (s)	Reviewing according to	ا.د/ امير حلاج
مقییم خارجی	external evaluator checklist	
•	report.	
Senior student (s)	none	
طلاب السنة النهائية		
Alumni	questionary	لا يقل عن ٥٠% من طلبة احر ٣ حضائ
الخريجون		
Stakeholder (s)	meetings	لمعال عباهم جيمما قائمه قبيد
أصحاب العمل		
Others	none	
طرق أخرى		

: التاريخ عن البرنامج : أ.د/ إيهاب أحمد عبد الرحمن التوقيع التاريخ :





Program Coordinato

Name: Prof. Dr: Ehab Ahmed Abdel Rahman Date 8/9/2013...... Date 8/9/2013.....

توصيف المقررات

Program courses

First part	
التشريح والفسيولوجيا	١
الفرماكولوجيا	۲
الفيزياء	٣
الاحصاء	٤
Second part	
علمى و عملى فى التخدير والعناية المركزة الجراحية	مقرر





الملحقات:

ملحق ۱: Academic standards of the program

ملحق ٢: المعايير القياسية العامة للدراسات العليا الصادرة عن الهيئة.

ملحق ٣: مصفوفة المعايير الأكاديمية للبرنامج مع المعايير القياسية للدراسات العليا الصادرة عن الهيئة.

ملحق ٤: مصفوفة نواتج تعلم البرنامج مع المعايير الأكاديمية للبرنامج.

ملحق و: مصفوفة المقررات مع البرنامج Program-Courses ILOs Matrix

ملحق ٦: توصيف المقررارات





Academic standards of the program ۱

جامعة بنما

كلية الطبب جسو التحدير والعباية المركزة البرامية

وثيقة المعايير الأكاديمية المرجعية لبرنامج الدكتوراة

Academic Reference Standards (ARS) for MD Degree in Anesthesia and post surgical ICU

1-Graduate Attributes.

- **1.1 Applying** the principles and methodologies of scientific research efficiently in anaesthesia and surgical intensive care.
- **1.2 Continuing** working to add data, researches and skills to the field of Anaesthesia and surgical intensive care and provide advanced scientific knowledge essential for anaesthesia and how can safely provide monitoring and restoration of homeostasis during the perioperative period as well as homeostasis in the critically ill patients.
- **1.3 Analyzing** and **criticizing** researches and theories in the field of Anaesthesia and surgical intensive care and the related sciences including (anatomy, physiology, pharmacology, physics and statistics).





- **1.4 Integrating** the science of Anaesthesia and surgical intensive care with (anatomy, physiology, pharmacology, physics and statistics)deducing and developing relations between them.
- **1.5 Showing** deep awareness of the ongoing problems and the recent visions and concepts in the field of Anaesthesia and surgical intensive care.
- **1.6 Identifying** the Anaesthesiological problems and propose creative solutions.
- **1.7 Performing** methods of supervision, teaching and evaluation of performance of both medical and paramedical personnel involved in anaesthesia, and critical care and wide the range of the Anaesthesia and surgical intensive care skills including (clinical management and teaching of cardiac and pulmonary resuscitation.
- **1.8 Improving** the existing new tools, methods and techniques in the field of Anaesthesia and surgical intensive care and develop new ones.
- **1.9 Applying** appropriate technological methods serving professional practice in Anaesthesia and surgical intensive care and different statistical technique and how to use it in field of anaesthesia .
- 1.10 Maintaining a lifelong learning competencies necessary for continuous professional development
- **1.11 Communicating** effectively and lead a team work in different professional contexts.
- **1.12 Using** the available data efficiently to make professional decisions in a wide range of Anaesthesia and surgical intensive care problems.
- **1.13 Preserving** the available resources by using them in the best way and attempt to find new resources.
- **1.14 Showing** awareness of his/her role in community development and improvement and in environmental preservation in the light of the global and regional variables.
- **1.15 Being** committed to the integrity and credibility of the profession and to the ethical rules of this sensitive specialty.





2. Academic Standards.

2.1 Knowledge and understanding.

By the end of MD program, the graduate should recognize and understand the followings.

- **2.1.1** The basic theories and principles and the recent advances in Anaesthesia and surgical intensive care and the related sciences including anatomy, physiology, pharmacology, physics and statistics.
- **2.1.2** The principles of anesthesia and clinical skills necessary for resuscitation and life support as practiced in critical care facilities
- **2.1.3** The basics, fundamentals, ethics and different tools of scientific research.
- **2.1.4** Fundamentals of ethical & legal principles in practicing Anaesthesia and surgical intensive care and related sciences including (anatomy, physiology, pharmacology, physics and statistics).
- **2.1.5** The updates in the field of anesthesia
- **2.1.6** The principles that govern ethical decision making in clinical practice, the scope and impact of human rights law on persons and groups as well as the medico legal aspect of medical malpractice and common medical errors.
- **2.1.7** The basic principles of quality control in professional practice in the field of Anaesthesia and surgical intensive care
- **2.1.8** The effect of Anaesthesia and surgical intensive care practice on the environment and the methods of environmental development and maintenance.
- **2.1.9** The impact of Anaesthesia and surgical intensive care problems on quality of life, regarding health, social, psychological and financial conditions, fitness to work and personal relationships and on other family members and caretakers of the patient.





2.2 Intellectual skills.

By the end of MD program, graduate should be able to recognize the followings:

- 2.2.1 How to analyse and evaluate information in the field of Anaesthesia and Surgical intensive care and the related sciences including (anatomy, physiology, pharmacology, physics and statistics).
 - **2.2.2 The** information in solving problems in anaesthesia and critical care and deducing from them.
 - **2.2.3** Anaesthetic problems based on the available data of patient.
- **2.2.4 How to construct** a list of initial anaesthesia plan and diagnostic hypothesis (differential diagnosis) for each problem with any shortage in information.
 - **2.2.5** How to Create a team composed of a number of specialists or residents at the same time with maximum safety.
- **2.2.6 How to interpret Interpret** patients symptoms and physical findings in terms of their anatomic, pathologic and functional diagnosis
 - **2.2.7 Analysing** patients data with relevance to his capabilities in the proper time or to transfer the patien to equipped center to deal with the anticipated problems.
 - **2.2.8** How to Conduct a scientific research which adds to Anaesthesia and Surgical intensive care knowledge.
 - **2.2.9 Formulating** scientific papers about Anaesthesia and Surgical intensive care topics.
 - **2.2.10** Risks in professional practices in the field of Anaesthesia and Surgical intensive care and determine the precautions to avoid those risks according to the appropriate understanding of risk assessment theories in Anaesthesia and intensive care.
 - **2.2.11 How to Develop** creative plans to improve performance and encourage evidence based learning and practice in the field of Anaesthesia and Surgical intensive care.





- **2.2.12 Making** professional decisions in diagnosis and management of Anaesthesia and Surgical intensive care cases.
- **2.2.13 Suggestion of** creative and innovative solutions to anaesthesiological and surgical intensive care problems in case of limited information.
- **2.2.14 How toManage** Scientific discussion based on scientific evidences and proofs about Anaesthesia and Surgical intensive care topics .
- **2.2.15** How to Judge researches related to Anaesthesia and Surgical intensive care.

2.3 Practical/Professional skills

By the end of MD program, graduate should accept the followings skills:

- **2.3.1 Performing** basic and advanced diagnostic and therapeutic procedures in the field of Anaesthesia and Surgical intensive care perfectly with satisfying outcomes.
- **2.3.2 Writing** and appraising clinical and lab reports about Anaesthesia and Surgical intensive care cases.
- **2.3.3 Evaluating** and developping methods and tools existing in the area of Anaesthesia and Surgical intensive care.
- **2.3.4 Performing** advanced techniques of general and regional anaesthesia
- **2.3.5 writing** an articulate, legible, comprehensive yet concise consultation note with clear and informative report, including a precise diagnosis whenever possible, a differential diagnosis when appropriate, and recommended follow up or additional studies as appropriate.





- **2.3.6 Applying** direct communication to the referring physician or appropriate clinical person when interpretation of a laboratory assay reveals an urgent critical, or unexpected finding and document this communication in an appropriate manner
- **2.3.7 Using** information technology to optimize patient care and enhance his/her lifelong Anaesthesia and Surgical intensive care learning skills
- **2.3.8 Planning** to improve his/her performance in the field of Anaesthesia and Surgical intensive care and improve the performance of others.
- **2.3.9 Applying** sterile, safe techniques and infection control guidelines according to international principles in Anaesthesia and Surgical intensive care practice

2.4 Communication and transferable skills.

By the end of MD program, graduate should accept the following skills:

- **2.4.1 Communicating** effectively with patients, colleagues and staff using different methods. Use information technology to improve his/her Anaesthesia and Surgical intensive care practice
- **2.4.2 Sharing** his/her own scientific and clinical skills with his colleagues evaluate their performance and progress in Anaesthesia and Surgical intensive care
- **2.4.3 Analyzing** his own practical experience in the field of Anaesthesia and Surgical intensive care to recognize his/her strengths, deficiencies, and limits in knowledge and expertise with continuous hard working to upgrade himself
- **2.4.4 Using** different sources of information (internet, library, lectures, attending conferences, scientific discussions,etc.) to acquire knowledge and to collect anaesthesiological and surgical intensive care data

Rather Street

برنامج دكتوراة التخدير و العناية المركزة الجراحية



- **2.4.5** Using the available time in smart manner
- **2.4.6 Applying** the principles of statistical methods for collection, presentation and analysis of all types of data.
- **2.4.7 Working** effectively and successfully as a teamwork member or leader to achieve a scientific goal related to the Anaesthesia and Surgical intensive care practice
- **2.4.8 Managing** and lead scientific symposium, and manage conversation and activities related to the field of Anaesthesia and Surgical intensive care and manage time effectively.
- **2.4.9 Respecting** all patients irrespective of their socio-cultural or religious status in the Anaesthesia and Surgical intensive care practice.
- **2.4.10 Conducting** patient interview with patience, attentive listening and respect in the Anaesthesia and Surgical intensive care practice.
- **2.4.11 Handling** appropriately difficult Anaesthesia and Surgical intensive care situations such as conveying bad news or dealing with patient and family anger.

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رئيس مجلس القسم

أ.د/سعد ابراهيم عتماد مجلس الكلية ٢٠١٣-٥-١٢





ملحق2: المعايير القياسية العامة لبرامج قطاع الدراسات العليا

برامج الدكتوراة

٢ مواصفات الخريج

ريج برنامج الد	د کتوراة فی ای تخصص یجب ان یکون قادرا علی:
1-1	اتقان اساسيات ومنهجيات البحث العلمي
7-1	العمل المستمر على الاضافة للمعارف في مجال التخصص
٣-١	تطبيق المنهج التحليلي والناقد للمعارف في مجال التخصص والمجالات ذات العلاقة
٤-١	دمج المعارف المتخصصة مع المعارف ذات العلاقة مستنبطا ومطورا للعلاقات البينية بينه
0_1	اظهار وعيا عميقا بالمشاكل الجارية والنظريات الحدية في مجال التخصص
7_1	تحديد المشكلات المهنية وايجاد حلولا مبتكرة لحلها
٧-١	اتقان نطاقا واسعا من المهارات المهنية في مجال التخصص
۸_١	التوجة نحو تطوير طرق وادوات واساليب جديدة للمزاولة المهنية
9_1	استخدام الوسائل التكنولوجية المناسبة بما يخدم ممارستة المهنية
1 1	التواصل بفاعلية وقيادة فريق عمل في سياقات مهنية مختلفة
11-1	اتخاذ القرار في ضل المعلومات المتاحة
17-1	توظيف الموارد المتاحة بكفاءة وتنميتها والعمل على ايجاد موارد جديدة
17-1	الوعى بدوره في تنمية المجتمع والحفاظ على البيئة
1 = 1	التصر ف بما يعكس الالتز ام بالنز اهة و المصداقية و قو اعد المهنة





١-٥١ الالتزام بالتنمية الذاتية المستمرة ونقل علمه وخبراته للاخرين

٣- المعايير القياسية

٢-١ المعرفة والفهم

بانتهاء دراسة برنامج الدكتوراة يجب ان يكون الخريج قادرا على الفهم والدراية بكل من:

- ٢-١-١ النطريات والاساسيات والحديث من المعارف في مجال التخصص والمجالات ذات العلاقة
 - ٢-١-٢ اساسيات ومنهجيات واخلاقيات البحث العلمي واداواته المختلفة
 - ٢-١-٣ المبادئ الاخلاقية والقانونية للممارسة المهنية في مجال التخصص
 - ٢-١-٤ مبادئ واساسيات الجودة في الممارسة في مجال التخصص
 - ٢-١-٥ المعارف المتعلقة بأثار ممارسته المهنية على البيئة وطرق تنمية البيئة وصيانتها

٢-٢ المهارات الذهنية

بانتهاء دراسة برنامج الدكتوراه يجب ان يكون الخريج قادرا على

- ٢-٢-١ تحليل وتقييم المعلومات في مجال التخصص والقياس عليها والاستنباط منها
 - ٢-٢-٢ حل المشاكل المتخصصة استنادا على المعطيات المتاحة
 - ٢-٢-٢ اجراء در اسات بحثية تضيف الى المعارف
 - ٢-٢-٤ صياغة أوراق علمية
 - ٢-٢-٥ تقييم المخاطر في الممارسات المهنية
 - ٢-٢-٢ التخطيط لتطوير الاداء في مجال التخصص
 - ٢-٢-٧ اتخاذ القرارات المهنية في سياقات مهنية مختلفة
 - ۲-۲-۸ الابتكار/الابداع
 - ٢-٢- الحوار والنقاش المبنى على البراهين والادلة

٢-٣ المهارات المهنية





بانتهاء دراسة برنامج الدكتوراة يجب ان يكون الخريج قادرا على

٢-٣-١ اتقان المهارات المهنية الاساسية والحديثة في مجال التخصص

٢-٣-٢ كتابة وتقييم التقارير المهنية

٢-٣-٢ تقييم وتطوير الطرق والادوات القائمة في مجال التخصص

٢-٣-٤ استخدام الوسائل التكنولوجية بما يخدم الممارسة المهنية

٢-٣-٥ التخطيط لتطوير الممارسة المهنية وتنمية اداء الاخرين

٢-٤ المهارات العامة والمنتقلة

بانتهاء دراسة برنامج الدكتوراه يجب أن يكون الخريج قادرا على

١-٤-٢ التواصل الفعال بأنواعه المختلفة

٢-٤-٢ استخدام تكنولوجيا المعلومات بما يخدم تطوير الممارسة المهنية

٢-٤-٢ تعليم الاخرين وتقييم ادائهم

٢-٤-٤ التقييم الذاتي والتعليم المستمر

٢-٤-٥ استخدام المصادر المختلفة للحصول على المعلومات والمعارف

٢-٤-٢ العمل في فريق وقيادة فرق العمل

٢-٤-٢ ادارة اللقاءات العلمية والقدرة على ادارة الوقت





ملحق3: مصفوفة مضاهاة المعايير الأكاديمية للبرنامج مع المعايير القياسية للدراسات العليا الصادرة عن الهيئة

مواصفات الخريج بالمعايير الأكاديمية للبرنامج	مواصفات الخريج بالمعايير القياسية للدراسات العليا (درجة الدكتوراة)
1.1 Applying the principles and methodologies of scientific research efficiently in anaesthesia and surgical intensive care	۱- ااتقان اساسيات ومنهجيات البحث العلمي
1.2 Continuing working to add data, researches and skills to the field of Anaesthesia and surgical intensive care and provide advanced scientific knowledge essential for anaesthesia and how can safely provide monitoring and restoration of homeostasis during the perioperative period as well as homeostasis in the critically ill patients.	1-٢العمل المستمر على الاضافة للمعارف في مجال التخصص
1.3 Analyzing and criticizing researches and theories in the field of Anaesthesia and surgical intensive care and the related sciences including	 ١-٣تطبيق المنهج التحليلي والناقد للمعارف في مجال التخصص والمجالات ذات العلاقة





(anatomy, physiology, pharmacology, physics and statistics).	
1.4 Integrating the science of Anaesthesia and surgical intensive care with (anatomy, physiology, pharmacology, physics and statistics)deducing and developing relations between them.	 ١-٤دمج المعارف المتخصصة مع المعارف ذات العلاقة مستنبطا ومطورا للعلاقات البينية بينها
1.5 Showing deep awareness of the ongoing problems and the recent visions and concepts in the field of Anaesthesia and surgical intensive care	۱-٥اظهار وعيا عميقا بالمشاكل الجارية والنظريات الحدية في مجال التخصص
1.6 Identifying the Anaesthesiological problems and propose creative solutions.	۱-٦ تحديد المشكلات المهنية وايجاد حلولا مبتكرة لحلها
1.7 Performing methods of supervision, teaching and evaluation of performance of both medical and paramedical personnel involved in anaesthesia, and critical care and wide the range of the Anaesthesia and surgical intensive care skills including (clinical management and teaching of cardiac and pulmonary resuscitation.	۱-۷اتقان نطاقا واسعا من المهارات المهنية في مجال التخصص





1.8 Improving the existing new tools, methods	۱-۸التوجة نحو تطوير طرق وادوات
and techniques in the field of Anaesthesia and	واساليب جديدة للمزاولة المهنية
surgical intensive care and develop new ones.	
1.9 Applying appropriate technological methods	١-٩استخدام الوسائل التكنولوجية
serving professional practice in Anaesthesia	المناسبة بما يخدم ممارستة المهنية
and surgical intensive care and different statistical technique and how to use it in field of anaesthesia	
1.11 Communicating effectively and lead a team	١-٠١ التواصل بفاعلية وقيادة فريق عمل
work in different professional contexts	فى سياقات مهنية مختلفة
1.12 Using the available data efficiently to make	١-١ التخاذ القرار في ضل المعلومات
professional decisions in a wide range of	المتاحة
Anaesthesia and surgical intensive care problems	
1.13 Preserving the available resources by using	١-٢ اتوظيف الموارد المتاحة بكفاءة
them in the best way and attempt to find new	وتنميتها والعمل على ايجاد موارد جديدة
resources.	





1.15 Being committed to the integrity and credibility of the profession and to the ethical rules of this sensitive specialty.	 ١-٤ التصرف بما يعكس الالتزام بالنزاهة والمصداقية وقواعد المهنة
1.10 Maintaining a lifelong learning competencies necessary for continuous professional development	۱-۱ الالتزام بالتنمية الذاتية المستمرة ونقل علمه وخبراته للاخرين

أ ـ المعرفة والفهم:

المعايير الأكاديمية للبرنامج By the end of MD program, the candidate should rece and understand the followings:	المعايير القياسية العامة (حرجة الدكتوراة) للدراسات العليا (درجة الدكتوراة) بأنتهاء دراسة برنامج الدكتوراة يجب ان يكون الخريج على فهم ودراية بكل من:
2.1.1 The basic theories and principles and the recent advances in Anaesthesia and surgical intensive care and the related	 ٢-١-١ النظريات والاساسيات والحديث من المعارف في مجال التخصص والمجالات ذات العلاقة





sciences including anatomy, physiology, pharmacology, physics and statistics 2.1.3 The basics, fundamentals, ethics and	٢-١-٢ اساسيات ومنهجيات واخلاقيات البحث
different tools of scientific research.	العلمى واداواته المختلفة
2.1.4 Fundamentals of ethical & legal principles in practicing Anaesthesia and surgical intensive care and related sciences including (anatomy, physiology, pharmacology, physics and statistics).	 ٢-١-٣ المبادئ الاخلاقية والقانونية للممارسة المهنية في مجال التخصص
2.1.7 T he basic principles of quality control in professional practice in the field of Anaesthesia and surgical intensive care	 ٢-١-٤ مبادئ واساسيات الجودة في الممارسة في مجال التخصص
2.1.9 The impact of Anaesthesia and surgical intensive care problems on quality of life, regarding health, social, psychological and financial conditions, fitness to work and personal relationships and on other family members and caretakers of the patient.	 ٢-١-٥ المعارف المتعلقة بأثار ممارسته المهنية على البيئة وطرق تنمية البيئة وصيانتها





ب ـ القدرات الذهنية:

ולאפונגע ולאטרנגמנה לארניומה ואטרנגמנה ועלטרנגמנה ואטרנגמנה ואטרנ	المعايير القياسية العامة (درجة (Generic) للدراسات العليا (درجة الدكتوراة) بانتهاء دراسة برنامج الدكتوراة يجب ان يكون الخريج قادرا على:
 2.2.1 How to analyse and evaluate information in the field of Anaesthesia and Surgical intensive care and the related sciences including (anatomy, physiology, pharmacology, physics and statistics). 2.2.2 The information in solving problems in anaesthesia and critical care and deducing from them. 	٢-٢- تحليل وتقييم المعلومات في مجال التخصص والقياس عليها والاستنباط منها





2.2.3 Anaesthetic problems based on the	٢-٢-٢ حل المشاكل المتخصصة استنادا
available data of patient.	على المعطيات المتاحة
2.2.8 How to Conduct a scientific research	۲-۲-۳ اجراء دراسات بحثية تضيف الى
which adds to Anaesthesia and Surgical	المعارف
intensive care knowledge.	
2.2.9 Formulating scientific papers about	٢-٢-٤ صياغة أوراق علمية
Anaesthesia and Surgical intensive care topics.	
2.2.10 Risks in professional practices in the	٢-٢- تقييم المخاطر في الممارسات
field of Anaesthesia and Surgical intensive	المهنية
care and determine the precautions to avoid	
those risks according to the appropriate	
understanding of risk assessment theories in	
Anaesthesia and intensive care.	
2.2.11 How to Develop creative plans to	٢-٢-٢ التخطيط لتطوير الاداء في مجال
improve performance and encourage	التخصص
evidence based learning and practice in the	
field of Anaesthesia and Surgical intensive	





care	
2.2.12 Making professional decisions in diagnosis and management of Anaesthesia and Surgical intensive care cases.	٢-٢-٧ اتخاذ القرارات المهنية في سياقات مهنية مختلفة
2.2.13 Suggestion of creative and innovative solutions to anaesthesiological and surgical intensive care problems in case of limited information.	٢-٢-٨ الابتكار/الابداع





ج. مهارات مهنية وعملية:

المعايير الأكاديمية للبرنامج	المعايير القياسية العامة (Generic) للدراسات العليا (درجة الدكتوراة)
By the end of MD program, candidate should acce wings skills:	بانتهاء دراسة برنامج الدكتوراة يجب ان يكون الخريج قادرا على:
2.3.1 Performing basic and advanced diagnostic and therapeutic procedures in the field of Anaesthesia and Surgical intensive care perfectly with satisfying outcomes. 2.3.2 Writing and appraising clinical and lab reports about Anaesthesia and Surgical intensive	 ۲-۳-۱ اتقان المهارات المهنية الاساسية والحديثة في مجال التخصص ۲-۳-۲ كتابة وتقييم التقارير المهنية
reports about Anaesthesia and Surgical intensive care cases.	
2.3.3 Evaluating and developping methods and tools existing in the area of Anaesthesia and Surgical intensive care	٢-٣-٣ تقييم وتطوير الطرق والادوات القائمة في مجال التخصص





2.3.4 Performing advanced techniques of general and regional anaesthesia 2.3.7 Using information technology to optimize patient care and enhance his/her lifelong Anaesthesia and Surgical intensive care learning skills	٢-٣-٤ استخدام الوسائل التكنولوجية بما يخدم الممارسة المهنية
2.3.8 Planning to improve his/her performance in the field of Anaesthesia and Surgical intensive care and improve the performance of others	٢-٣-٥ التخطيط لتطوير الممارسة المهنية وتنمية اداء الاخرين

د . مهارات عامة و منتقلة :

المعايير الأكاديمية للبرنامج	المعايير القياسية العامة (Generic) للدراسات العليا (درجة الدكتوراة)
By the end of MD program, candidate should a the following skills:	بانتهاء دراسة برنامج الماجستير يجب ان يكون الخريج قادرا على:





2.4.1 Communicating effectively with	٢-٢-١ التواصل الفعال بأنواعه المختلفة
patients, colleagues and staff using different	
methods. Use information technology to	
improve his/her Anaesthesia and Surgical	
intensive care practice	
2.4.3 Analyzing his own practical experience	٢-٤-٢ استخدام تكنولوجيا المعلومات بما
in the field of Anaesthesia and Surgical	يخدم تطوير الممارسة المهنية
intensive care to recognize his/her strengths,	
deficiencies, and limits in knowledge and	
expertise with continuous hard working to	
upgrade himself	
2.4.4 Using different sources of information (
internet, library, lectures, attending	
conferences, scientific discussions,etc.) to	
acquire knowledge and to collect	
anaesthesiological and surgical intensive care	
data	
2.4.2 Sharing his/her own scientific and	٢-٤-٣ تعليم الاخرين وتقييم ادائهم
clinical skills with his colleagues evaluate	
their performance and progress in Anaesthesia	
their performance and progress in Anacstricsia	





and Surgical intensive care	
2.4.3 Analyzing his own practical experience	٢-٤-٤ التقييم الذاتي والتعليم المستمر
in the field of Anaesthesia and Surgical	
intensive care to recognize his/her strengths,	
deficiencies, and limits in knowledge and	
expertise with continuous hard working to	
upgrade himself	
2.4.4 Using different sources of information (المصالب المختلفة المصالب المختلفة المصادل
· ·	٢-٤-٥ استخدام المصادر المختلفة للحصول على المعلومات والمعارف
internet, library, lectures, attending	3 3 3
conferences, scientific discussions,etc.) to	
acquire knowledge and to collect	
anaesthesiological and surgical intensive care	
data	
2.4.7 Working effectively and successfully as	٢-٤-٢ العمل في فريق وقيادة فرق العمل
a teamwork member or leader to achieve a	
scientific goal related to the Anaesthesia and	
Surgical intensive care practice	





- **2.4.5 Using** the available time in smart manner
- **2.4.8 Managing** and lead scientific symposium, and manage conversation and activities related to the field of Anaesthesia and Surgical intensive care and manage time effectively

٢-٤-٧ ادارة اللقاءات العلمية والقدرة على ادارة الوقت





ملحق ٤: مصفوفة مضاهاة نواتج تعلم البرنامج مع المعايير الاكاديمية للبرنامج

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2.b.15	2.b.14	2.b.13	2.b.12	2.b.11	2.b.10	2.b.9	2.b.8	2.b.7	2.b.6	2.b.5	2.b.4	2.b.3	2.b.2	2.b.1	
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						Gene	ral aı	nd tr	ansf	erable skills									
					2.d.11	2.d.10	2.d.9	2.d.8	2.d.7.	2.d.6	2.d.5	2.d.4	.2.d.3.	2.d.2.	2.d.1				





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ملحق (٥) مصفوفة المعارف والمهارات للبرنامج الدراسي

	Knowledge & Understanding المعارف									ILOs	
a	a.9.	2.a.8	2.a.7	2.a.6	2.a.5	2.a.4	2.a.3	2.a.2	2.a.1		Courses & codes
	•					-				ANET 701	Anatomy and physiology
						-		•	•	ANET 702	Pharmacology
	-	•				-	•			ANET 703	Physics
	•					•				ANET 704	Statistics
	•			•		•				ANET 705	Anesthesia and post surgical
											ICU





							نية	ات ذهن	I مهار	ntello	ectua	ıl Ski	ills		IL(Os /
2.B.15	2.B.14	2.B.13	2.B.12	2.B.11	2.B.10	2.B.9	2.B.8	2.b.7	2.b.6	2.b.5	2.b.4	2.b.3	2.b.2	2.b.1		es & codes
													•		ANET 701	ANATOMY and Physiology
															ANET 702	Pharmacology
															ANET 703	PHysics
															ANET 704	Statistics
															ANET 705	Anesthesia and post surgical ICU





	ILOs	Practical & Clinical Skills مهارات عملية و مهنية								
Courses & codes		2.c.1	2.c.2	2.c.3	2.c.4	2.c.5	2.c.6	2.c.7.	2.C.8	2.C.9
Anatomy and Physiology	ANET 701									
Pharmacology	ANET 702									
Physics	ANET 703									
Statistics	ANET 704									
Anesthesia and post surgical ICU	ANET 705									

				ن عامة	G مهاران	eneral	and tr	ansfera	able		ILO	Os
2.d.11	2.d.10	2.d.9	2.d.8.	2.d.7.	2.d.6	2.d.5	2.d.4	2.d.3	2.d.2	2.d.1		Courses &
							•				ANET 701	Anatomy and Physiology
											ANET 702	Pharmacology
											ANET	Physics
											ANET	Statistics
											ANET 705	Anesthesia and post surgical ICU

أستاذ المادة رئيس القسم التوقيع التوقيع :





ملحق ٦: توصيف المقررارات

			جامعة / أكاديمية : بنها.
			كلية / معهد : .الطب
		اية المركزة الجراحية	نسم :التخدير و العنا
	توصيف مقرر دراسي		
		١ – بيانات المقرر	
الفرقة / المستوى :دكتوراة	Anatomy	الرمز الكودي:	
* 1	اسم المقرر: Anatomy	A NICT701	

ANET701

التخصص:

جزء اول

عدد الوحدات الدراسية: نظري عملي عملي





1.1 The aim of the program is to provide the postgraduate educational experience necessary for further practice in **anatomy levant to anthesia**1.2 To educate postgraduates about the experimental embryology to give them the key stone in understanding the anatomy of the relevant parts
1.3 To enable the postgraduates to practice the principles of preparation the anatomical regional structure, their vasculature, innervations, relations & specific clinical significans

٢ - هدف المقرر:

٣- المستهدف من تدريس المقرر:





2.a.2 Classify the most common variations to give an idea for the clinical application.	أ- المعلوماد والمفاهيم :
2.a.2 Classify the most common variations to give an idea for the clinical application. 2.a.3 Point out the impact of fine structure of the	والمعاميم .
an idea for the clinical application.	
2.a.3 Point out the impact of fine structure of the	
anatomical components.	
2.a.4 Describe the most important landmarks.	
2.a.5 Describe the details of surgical & applied	
anatomy, of the relevant parts	
2.a.6 Apply the radiological anatomy to know	
structure of deeper details.	
2.a.7 Apply the surface anatomy of the visible and	
deeper structures of the body.	





2.b.1- Analyze the different techniques ,stains, and chemicals for preservation & study of the anatomical	ب- المهارات
specimen and tissues	الذهنية:
2.b.2- Interpret result of radiological and surface anatomy	
2.b.3- Solve problem of environmental factors on the development of body systems, relevant to anethesia	





2.c.1-Comunicate effectively with teaching stuff and	l
colleagues.	

ج- المهارات المهنية

2.c.2- Respects appropriate attitude towards teaching stuff, colleagues&*patients*

الخاصة بالمقرر:

2.c.3- Appropriate ethical and professional education necessary for demonstrating appropriate attitudes with students, colleagues. *apatients*





2.d.1Establish life-long self-learning required for continuous professional development.

- 2.d.2Use the sources of biomedical information and communication technology to remain current with advances in knowledge and practice.
- 2.d.3Establish effective interpersonal relationship to Communicate ideas and arguments.
- 2.d.4Retrieve, manage, and manipulate information by all means, including electronic means.
- 2.d.5Present information clearly in written, electronic and oral forms.
- 2.d.6Establish effective interpersonal relationship to Communicate ideas and arguments.
- 2.d.7Apply the principles of statistical methods for collection, presentation & analysis of all types of data

٦٨





HEAD&NECK:

- -Mouth, Tongue, Palate, Pharynx, Oesophagus, and Trachea
- -Nose&Paranasal sinuses.
- -Middle ear and Pharyngeotympanic(Auditory) tube.
- -Glands:Salivary,Thyroid,Thymus&Pituitary.
- -Blood vessels and all nerve elements in Head&Neck.

THORAX:

- -Trachea, Bronchi & Lungs with Bronch-pulmonary segments.
- -Pericardium and Heart(Morphology &Blood supply).
- -Vessels and Nerves in thorax.
- -Diaphragm.

NEUROANATOMY:

- -Brain & Spinal cord:Morphology,Covering meninges.CSF and Blood Supply.
- -Vertebral canal & intervertebral foramina(canals) Nerves:Cranial &Spinal nerves(origin,course&distribution).
- -Autonomic Nervous System(Centers, Nerves&Ganglia).
- -Structure of the Brain &Spinal cord,connection,All about pathways(somatic&visceral-Afferent&Efferent pathways).
- -Internal capsule:Position,Shape,Parts,Relation of its fibers and blood supply.

٤ – محتوى المقرر:





METHODS USED: Modified Lectures Small group discussions	0- أساليب التعليم والتعلم
Practical classes	
	٦- أساليب التعليم
	والتعلم للطلاب ذوى القدرات المحدودة
	٧- تقويم الطلاب:





ATTENDANCE C	CRITERIA:	أ- الأساليب			
B) Assessment TO	OLS:	أ- الأساليب المستخدمة			
Tool	Tool Purpose (ILOs)				
Written examination	To assess knowledge and understanding and intellectual skills				
Oral examination	To assess knowledge and understanding and intellectual skills and how to make a decision.				
TIME SCHEDUL	<u>E</u> :	ب- التوقيت			
Exam	Month				
1- First exam	May or September				





Weighting System:	ـ- توزيع الدرجات
	توریع اندرجات

Examination	Marks allocated
a- Written	100
b- Oral	100
Total	200

- Passing grades are: EXCELLENT >85%, VERY GOOD 75-<85%, GOOD 65-<75% and FAIR 60-<65%.

FORMATIVE ASSESSMENT:

Postgraduates knows his marks after the Formative exams.

٨- قائمة الكتب الدراسية والمراجع:
 أ- مذكرات





Department Books in:	ب- كتب ملزمة
Neuroanatomy -Head & neck	
-General anatomy Thorax Gray's anatomy :standering et al 2008	
Last :Anatomy regional & applied 2006	
T.W. Sadler :Medical embryology 2010	
Carpenter's: Human anatomy, Andere Parent.1996	
Cunningham:Romances,1997	ج- كتب مقترحة
Keith Moore & Persaud : before we are born, 2008	
BruceCarlson:Humanembryology&development,2009	





- <u>Periodicals, Web sites, etc</u> : www.bfom.edu.eg	د – دوريات علمية
	أو نشرات الخ

أستاذ المادة : اد/عبد الونيس الاودن........... رئيس مجلس القسم العلمي : ..اد/سعدية شلبي...........





جامعة / أكاديمية : بنها....

			كلية / معهد : .الطب
		اية المركزة الجراحية	قسم :التخدير و العنا
	توصيف مقرر دراسي		
		١ - بيانات المقرر	
الفرقة / المستوى :دكتوراة	Physiology: "II I	الرمز الكودي:	
جزء اول	اسم المقرر: Physiology	ANET701	
ی 1 عملی	عدد الوحدات الدراسية: نظر	التخصص :التخدير	
پ 1 حي		و العناية المركزة	
		الجراحية	





- **1.1**.Physiology course aims at approaching to the detailed knowledge of human physiology.
- ٢ هدف المقرر:
- **1.2.**facilitate understanding the clinical data for the student in the clinical practice.
- **1.3.** develop skills associated with improved health care and health care cervices.
- 1.4. Basic scientific knowledge essential to practice medicine at the primary level of health, dealing with health problems commonly met- with- in clinical practice.
- 1.5. Basic scientific knowledge essential l for establishing & maintaining good doctor/ patient relationship.
- 1.6. Basic scientific knowledge essential for following the rules of medical ethics .
- 1.7. Diagnostic, problem solving and decision making as well as communication skills necessary for proper evaluation and management of health problems.
- 1.8. Life long learning competencies necessary for continuous professional development.
- 1.9. Research education as related to medical practice & post graduation development





٣- المستهدف من تدريس المقرر:





2.a.1- List according to priority the main functions of systems, organs and cells.	أ- المعلومات والمفاهيم :
2.a.2- Explain and describe the basic and detailed physiological processes in correct medical terms and in correct order.	والمفاهيم :
2.a.3- Memorize important physiological definitions and laws.	
2.a.4-understand the different mechanisms of homeostasis and how to use it in applied physiology.	
2.a.5- provide excellence in medical education, research	
2.a.6- approaching to the detailed knowledge of physiology in relation of anesthesia.	





2.b.1- Identify deviations from the normal physiology and its effects.

ب- المهارات الذهنية

- 2.b.2- Interpret clinical manifestations into physiological data.
- 2.b.3- Illustrate physiological information in the form of simplified diagrams with complete data on it.
- 2.b.4- Interconnect different branches of physiology to that of anesthesia.
- 2.b.5- Analyze any physiological curve related to anesthesia.
- 2.b.7- The ability to search, analyze and summarize updated physiological information.
- 2.b.8-. Describe the normal structure and function of the human body and mind at the molecular, biochemical, cellular, levels (including the principles of genetics), to maintain the body homeostasis.





2.c.1- Perform efficiently the appropriate steps and procedures in measuring pulse, respiratory rate and arterial blood pressure.

ج- المهارات المهنيةالخاصة بالمقرر:

2.c.2- asses acid base and electrolyte balance.

2.c.3- interpret different laboratory tests as isolated perused heart

2.c.4-asses pulmonary function tests

2.c.5-record intestinal motility in animals under various conditions.

2.c.6-asses skeletal and smooth muscle contraction

2.c.7- study and read ECG papers.





2.d.1- deal properly and cautiously in a lab.	د - المهارات العامة
---	---------------------

- 2.d.2- Use the sources of biomedical information to remain current with the advances in knowledge & practice.
- 2.d.3- Perform tests showing the molecular, biochemical, and cellular mechanisms that are important in maintaining the body's homeostasis.
- 2.d.4- Demonstrate the functions of the body and its major organ systems that are seen in anesthesia diseases and conditions.
- 2.d.5- Perform routine technical procedures; diagnostic and therapeutic (including life support).





	٤- محتوى المقرر:
Neurotransmitters	
Pain sensation.	
Pain control system.	
Stretch reflex and muscle tone.	
Autonomic receptors.	
Neuromuscular transmission.	
Arterial blood pressure and its regulation'	
C.O.P and its regulation.	
E.C.G (Leads , record , normal and upnormal E.C.G	
)	
Hemorrhage and shock.	
Factors affecting exchange of gases across the	
pulmonary membrane.	
Gas transport by the blood	
Regulation of respiration.	
Pulmonary function tests.	
Hypoxia and cyanosis.	
Acid – base balance.	
Anemia Anemia	
Fever	

Thyroid hormone





	٥- أساليب التعليم
1.General lectures	والتعلم
2seminares 3-confrences	
	٦- أساليب التعليم
	والتعلم للطلاب ذوي
	القدرات المحدودة
	٧- تقويم الطلاب:





Assessment TOOI	<u>.S:</u>	أ- الأساليب
Tool	Purpose (ILOs)	أ- الأساليب المستخدمة
Written examination	To assess knowledge acquisition, including MCQs and problem solving	المستخدمة
Oral examination	To assess understanding and stability of knowledge given, attitude and presentation.	
TIME SCHEDUL	<u>E</u> :	ب- التوقيت
Exam	Week	
5- Final exam	at end of second term (May-June)	





Examination	Marks allocated	% of Total Marks
2- Final exam:		
a- Written	100	50%
b- Oral	100	50%
Total	200	100%

- Passing grades are: EXCELLENT >85%, VERY GOOD 75- <85%, GOOD 65- <75% and FAIR 60-<65%.

۸− قائمة الكتب الدراسية والمراجع : أ− مذكرات

Course notes.

Theoretical and practical books are available from faculty bookshops





Essential books (text books)	ب- كتب ملزمة
Poul-Erik Paulev(2007): Medical Physiology And	
Pathophysiology	
Essentials and	
clinical problems	
	ج- كتب مقترحة
6.3- Recommended books Poul-Erik Paulev (2009):): Medical Physiology Textbook	
6.4- Guyton 2008	
6.5-ganong 2008	
6.3- Periodicals, Web sites, etc	





www.jap.physiology.org.

www.physiologyonline.physiology.org/cgi/content

asmnews@asmusa.org

http://www.phage.org/black09.htm

د - دوريات علمية أو نشرات ... الخ

أستاذ المادة :اد/علاء التليس رئيس مجلس القسم العلمي : اد/علاء التليس ..





			جامعة / أكاديمية : بنها.
			كلية / معهد : .الطب
		اية المركزة الجراحية	قسم :التخدير و العنا
	توصيف مقرر دراسي		
		١ - بيانات المقرر	
الفرقة / المستوى :دكتوراة	اسم المقرر	الرمز الكودي :	
جزء اول	Pharmacology:	ANET702	
ي 1 عملي	عدد الوحدات الدراسية: نظر	التخصص : التخدير	
پ 1 –۔ي	<u>, , , , , , , , , , , , , , , , , , , </u>	و العناية المركزة	
		الجراحية	
	ps of drugs affecting different ir implications in therapy of	٢- هدف المقرر :	





٣- المستهدف من تدريس المقرر:





2.a.1- Discuss the pharmacokinetic,	
pharmacodynamic and pharmacotherpeutic	
properties of different groups of drugs affecting	
body systems.	

2.a.2- Discuss the adverse and toxic effects, and their management of commonly

used groups interactions.

2.a.4- Define clinically relevant age, sex and genetic related variations that affect response to drugs.

2.a.5- Discuss the pathophysiology of diseases and explain the rational basis for the use of drugs.

2.a.6- Discuss the impact of preventive pharmacology in promoting health and prevent illness.

2.a.7- Define the principles, the indications, the relative advantage and disadvantages of various pharmacotherapy modalities.

2.a.8- Discuss the use of life saving drugs.

أ- المعلوماتوالمفاهيم:





2.b.1- Obtain and record a comprehensive drug history of the patient.2.b.2- Document drug adverse reactions.	ب- المهارات الذهنية:
2.c.1- Design rational therapeutic strategies for both acute and chronic conditions that take into account the various variables that influence these strategies.	ج- المهارات المهنيةالخاصة بالمقرر :
Choose the proper drug(s) for the proper clinical situation in proper dosage.	الخاصة بالمقرر:
2.d.1- Demonstrate respect to all patients irrespective of their socioeconomic levels, culture or religious	د - المهارات العامة:
beliefs and use language appropriate to the patient's culture. 2.d.2- Provide appropriate basic drug education to the patient and his family. 2.d.3- Understand the importance of life-long self-learning and show a strong commandment to it.	العامة:
learning and show a strong communication.	





٤- محتوى المقرر: 1-General pharmacology • Basic principles of pharmacokinetics. • Drug interactions. 2-Autonomic nervous system Sympathomimetics Sympatholytics Parasympathomimetics Parasympatholytics Skeletal muscle relaxants. Ganglion stimulants and ganglion blockers. 3-Autachoids • Histamine & antihistaminic drugs 4-Cardiovascular pharmacology Drug therapy of heart failure. Antiarrythmic drugs. Treatment of hypertension. Drug therapy of ischemic heart diseases. 5-Pharmacology of blood Anticoagulants Antithrombotic drugs Antiplatelets Drug treatment of hemorrhage. Drug therapy of shock 6-Pharmacology of respiration Analeptics and respiratory stimulants Respiratory gases. Treatment of bronchial asthma. Cough therapy. 7-Endocrine pharmacology Treatment of acute complications of diabetes mellitus (hypoglycemic ,non ketotic hyperglycemic coma, ketoacidosis and lactic acidosis). Corticosteroids. Drug therapy of disorders of calcium homeostasis. 8-CNS pharmacology Sedatives & hypnotics Antidepressants Antipsychotics. Analgesics. Anticonvulsants.

Local anesthetics.

General anesthetics





Lectures	٥- أساليب التعليم
Practical modules	والتعلم
	, 3
	٦- أساليب التعليم
	والتعلم للطلاب ذوى القدرات المحدودة
	٧- تقويم الطلاب:





	Tool	Purpose (ILOS)	أ- الأساليب
	Writter	To assess knowledge	أ- الأساليب المستخدمة
	examination	acquisition, including	
		MCQs and problem solving.	
	Oral examination	To assess understanding and	
		stability of knowledge	
		given, attitude and	
		presentation.	
			ب- التوقيت
	Exam	Week	
	1- First part	After 6 months from	
	exam	registration for MSc. degree	
written	exams.	50 %:	ج- توزيع الدرجات
		al Examination	
	10 % Se	emester Work	
(Other types of Ass	essment	
100%		Total	
		ية والمراجع	٨- قائمة الكتب الدراس





Course Notes	أ- مذكرات
Handouts updated administered by staff members	ا مددرات
Essential Books (Text Books):	م کتر مانی ق
David E. Golan; Armen	ب- كتب ملزمة
H. Tashjian; Ehrin J. and	
Armstrong et al.(2005):	
Principles of pharmacology:	
the pathophysiologic basis of	
drug [et al.], Philadelphia:	
Lippincott Williams &	
Wilkins	
	ج- كتب مقترحة
·	
Recommended Books:	
GOODMAN AND GILMAN(2005): THE	
PHARMACOLOGICAL BASIS OF	
THERAPEUTICS 11 th edition.	
TILLUM ECTION II COMON.	





web Sites:	د – دوريات علمية
	أو نشرات الخ
www.micromediex.co	

أستاذ المادة :اد/مهند محمد ابراهيم...... رئيس مجلس القسم العلمي : اد/احمد سليم..





جامعة / أكاديمية : بنها	
كلية / معهد : .الطب	
نسم:التخدير و العناية المركزة الجراحية	
تو	توصیف مقرر دراسی

		١ - بيانات المقرر
الفرقة / المستوى :دكتوراة	Physics: # 11 1	الرمز الكودي
جزء اول	اسم المقرر: Physics	ANET703:
ري 2 عملي 🗀	عدد الوحدات الدراسية: نظر	التخصص : التخدير
ري 2 ڪي		و العناية المركزة
		الجراحية





- 1.1 Application of education as related to medical practice & post graduation development.
- 1.2 Determining techniques & use it in field of anaesthesia.
- 1.3 Basic administrative skills necessary for delivery of health service.
- 1.4 Diagnostic, problem solving and decision making as well as communication skills necessary for proper evaluation and management of health problems.
- 1.5 Detect the health problems in field of anaesthesia & find proper solutions .
- 1.6 Using the available recourses to achieve the best value.
- 1.7 Show adequate understanding in community development& to shed light in national & international changes.
- 1.8 Basic scientific knowledge essential for following the rules of medical ethics.
- 1.9 Lifelong learning competencies necessary for continuous professional development.

٣- المستهدف من تدريس المقرر:

٢- هدف المقرر:





2.a.1 Recognize the principles & hypothesis of anaesthetic problem with surveillance and screening of all related topics.

المعلوماتإلمفاهيم:

- 2.a.2 Identify the Principles & the organization of the Egyptian health care system, the importance of responsiveness to changes in healthcare policy.
- 2.a.3 Identify the principles that govern ethical decision making in clinical practice, the scope and impact of human rights law on persons and groups as well as the medico-legal aspect of medical malpractice and common medical errors.
- 2.a.4 Application of use of anaesthesia on environment and how to prevent its hazards.





2.b.1 Analyze, assess & combine the information of clinical and investigational database to be proficient in clinical problem solving.

ب- المهارات الذهنية:

- 2.b.2 Generate a list of initial diagnostic hypothesis (differential diagnosis) for each problem with any shortage in information.
- 2.b.3 Combine all sources of information in addition to the patient interview to interpret and evaluate the medical history. Such sources include family or friends, medical records and other health care professionals, to overcome limitations regarding information.
- 2.b.4 Interpret patient symptoms and physical findings in terms of their anatomic, pathologic and functional diagnostic significances.
- 2.b.5 Decision making in various anaesthetic problems.

1 . .





2.c.1 Utilize the basic professional skills of clinical as inspection, palpation, percussion and auscultation in detecting the general & local physical abnormalities for preoperative assessment.

2.c.2 Perform & interpret all clinical assessment to recognize normal & abnormal findings .

2.c.3 Perform basics of general and regional anaesthesia.

2.c.4 Perform basics of routine technical procedures both diagnostic and therapeutic .

2.c.5 Prescribe & evaluate the medical reports .

ج- المهارات المهنية

لخاصة بالمقرر:





2. d.1 Useful communication with different categories.

2.d.2 Use technology resources to in reach the workshops in anaesthesia.

2.d.3 Self-learning & evaluation to detect education needs .

2.d.4.a Use the sources of biomedical information and communication technology to remain current with advances in knowledge and practice.

2.d.4.b Apply the principles of statistical methods for collection, presentation & analysis of all types of data

•

2.d.5Work effectively as a member or a leader of an interdisciplinary team.

2.d.6 Use the available time with smart manner.

2.d.7 Establish life-long self-learning required for continuous professional development.

. - المهارات

عامة :





٤ - محتوى المقرر:

- 1. Airway equipment
- 2. Breathing circuits
- 3. Central venous access
- 4. Depth of anaesthesia
- 5. Laryngoscopes
- 6. Medical equipment
- 7. Medical gases
- 8. Monitoring &physical principles
- 9. Scavenging
- 10. Temperature
- 11. Ultrasound
- 12. Vaporizers
- 13. Ventilation





1. 2. 3.	Modified Lectures Problem solving Self learning	٥- أساليب التعليموالتعلم
		٦- أساليب التعليم
		والتعلم للطلاب ذوى القدرات المحدودة
		القدرات المحدودة
		٧- تقويم الطلاب:





Tool P		
	Purpose (ILOs)	
Written T	o assess knowledge &	
examination in	ntellectual skills.	
Oral examination T	o assess knowledge,	
in	ntellectual skills& general&	
tr	ransferable skills.	
TIME SCHEDULE:	Faculty bylaws	ب- التوقيت
Exam	Timing	
2- Final exam	6 months after registration	
	Either in October or May.	





Weighting System:

SUMMATIVE ASSESSMENT:

Examination	Marks allocated	% of Total Marks
First part		
a- Written	100	50%
b- Oral	100	50%
Total	200	100%

The minimum passing & Passing grades (Faculty bylaws).

٨- قائمة الكتب الدراسية والمراجع:
 أ- مذكرات

-Handouts of staff members in the department

ج- توزيع الدرجات





4 11 1	
1-clinical anesthesiology Barash: Paul G.Barash,Robert k.	ب- كتب ملزمة
Stoelting, Bruce F. Cullen	
2-clinical anesthiology Morgan: John F.ButterworthIV,	
David C.Macky, John D.Wasnick	
3-Miller 2010:http://www.hermanmiller.com	
	ج- كتب مقترحة
Websites:	د – دوريات علمية
a-http://en.wikipedia.org/wiki/PubMed	د – دوريات علمية أو نشرات الخ
b-http://.sciencedirect.com/	او نشرات الخ
c-http://www.oxfordjournals.org	
d-	
http://springer.com/medicine/anesthesiology/journal/12630	
e-http://journals.lww.com/anesthesia-	
analgesia/pages/	
f-	
http://blogs.nejm.org/now/index.php/tag/anesthesia	

أستاذ المادة :اد/سعد ابراهيم رئيس مجلس القسم العلمي : ...اد/سعد ابراهيم





جامعة / أكاديمية : بنها	
كلية / معهد : طب	
قسم: التخدير و العناية المركزة الجراحية	
i	توصیف مقرر دراسی

		١- بيانات المقرر
الفرقة / المستوى :دكتوراة	1 - 811 - 5 11 - 1	الرمز الكودي:
جزء اول	اسم المقرر:الاحصاء	ANET704
نظري 2 عملي ا	عدد الوحدات الدراسية :	التخصص :التخدير
ـــري 2 ـــي		والعناية المركزة
		الجراحية





To equip candidates with Principles of Biostatistics, types of data, methods of presentation of data, types of - Epidemiological studies, Sampling, statistical methods& research methods.

To provide the candidates with the knowledge and skills necessary to practice statistical analytical methods and research - methods.

المقرر:

To enable the candidates to evaluate the health problems. -

٣- المستهدف من تدريس المقرر:





2.a.1 Understand and devise Anesthesia & Surgical Intensive Care program based on local needs.	-1
2.a.2Describe the basics of Principles of Biostatistics, types of data, methods of presentation	
of data, types of Epidemiological studies, Sampling, statistical methods and research methods.	المعلومات
	والمفاهيم
	:





2 .b.1 2.b.2	Choose suitable methods for conducting research. Choose suitable methods for analysis of data.	ب-
2.b.3	Select appropriate method for evaluate the health problem.	المهارات
		الذهنية:





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

2.c.2 Conduct proper counseling practices to provide appropriate basic research methods.

2.c.3 Respect the role of others, superiors, colleagues and all members of the health profession .

2.c.4 Conduct different types of surveys.

2.c.5 Apply the principles of statistical methods for collection, presentation & analysis of all types of data.

المهارات

المهنية

لخاصة

بالمقرر:





2.d.1 Establish life-long self-learning required for continuous professional development.	- 7
2.d.2 Use the sources of biomedical information and communication technology to	
remain current with advances in knowledge and practice.	المهارات العامة:
2.d.3 Retrieve, manage, and manipulate information by all means, including electronic means.	العامة:
2.d.4 Present information clearly in written, electronic and oral forms.	
2.d.5 Conduct counseling sessions for prevention & control of different conditions for	
healthy individuals, for patients as well as their families.	
2.d.6 Establish effective interpersonal relationship to Communicate ideas and arguments.	





Types of data Collection of data: Sampling Screening **Epidemiological studies** Summarization of data: Measures of dispersion Measures of central tendency Presentation of data: Tabular presentation Graphic presentation Mathematical presentation Normal distribiution curve Vital rates Normal distribution curve Hypothesis testing Ethics of research





Lectures.	2
Practical classes	-0
Small group discussion with case study and problem solving	أساليب
	التعليم
	أساليب التعليم والتعلم
	٦-
	أساليب
	التعليم
	أساليب التعليم والتعلم للطلاب ذوى
	للطلاب
	ذو <i>ى</i>
	القدرات المحدودة
	المحدودة
طلاب:	٧- تقويم الم





sses	Tool		Durnoso (II	O g)	
			Purpose (IL		
<u> </u>	Written examina		To assess knowledge acquisition,	<u> </u>	ب
	Oral examina	ation	To assess understanding and stal		بب <u>د</u> مة
				attitude and presentation.	فدمة ا
Asses	sment schedule				
	Exam		Time		
	Written exam		1.0. 6 .1. 6		ت
	willen exam		After 6 months of registra	ation of the degree.	
	Oral exam		After 6 months of registra Afte	r the written exam.	
Moial	Oral exam			<u> </u>	
Weigh				<u> </u>	
Weigl	Oral exam			<u> </u>	
Weigh	Oral exam		Afte	r the written exam.	زيع [
Weigl	Oral exam hting System Examination		Afte Marks allocated	r the written exam. % of Total Marks	زیع [
Weigh	Oral exam hting System Examination Written		Marks allocated	written exam. % of Total Marks 50%	زیع [
Weigh	Oral exam hting System Examination Written Oral		Marks allocated 100 100	**The written exam.** **The written exam.**	زیع ت
	hting System Examination Written Oral Total	oteboo	Marks allocated 100 100 200	" the written exam. "" of Total Marks 50% 100% • والمراجع:	زيع [
nateria	hting System Examination Written Oral Total als like Department no	oteboo	Marks allocated 100 100	" the written exam. "" of Total Marks 50% 100% • والمراجع:	زيع ت
	hting System Examination Written Oral Total als like Department no	oteboo	Marks allocated 100 100 200	" the written exam. "" of Total Marks 50% 100% • والمراجع:	زیع ت





Essential books (text books) like <i>Khalil IF</i> , <i>1999:</i> Biostatistics, Cairo University	ب– كتب ملزمة
Recommended books like <i>Maxcy RL</i> , 2008: Public health and preventive medicine	ج- كتب مقترحة
Periodicals, Web sites, etc: WHO.int.com Pub. Med Google Science direct	د – دوريات علمية أو نشرات الخ





مجلس القسم العلمي :اد/محمود فوزى الجندى	رئيس	لهادیلهادی	مصطفی ا	: اد/هالة	ناذ المادة	أسد
		••••				





جامعة / اكاديمية : بنها
كلية / معهد : .الطب
قسم:التخدير و العناية المركزة الجراحية

توصيف مقرر دراسي

		١- بيانات المقرر
الفرقة / المستوى :دكتوراة	اسم المقرر :التخدير و العناية	الرمز الكودي :
جزء ثانى	المركزة الجراحية	ANET 705
ي 9 عملي 9	عدد الوحدات الدراسية: نظر	التخصص :دكتوراة
ي حد هدي حد	عدد الوحدات الدراسي .	التخدير و العناية
		المركزة الجراحية





aim of the program is to provide the postgraduate educational the field of anaesthesia experience necessary for further practice in including general practice, residency programs, medical research, public health or health service administration through providing:

- 1.1 Research education as related to medical practice & post graduation development.
- 1.2 Apply statistically analysis techniques & use it in field of anaesthesia.
- 1.3 Basic administrative skills necessary for delivery of health service.
- 1.4 Diagnostic, problem solving and decision making as well as communication skills necessary for proper evaluation and management of anaesthetic problems.
- 1.5 Detect the health problems in field of anaesthesia & find proper solutions .
- 1.6 Appropriate ethical and professional education necessary for demonstrating appropriate attitudes with patients and colleagues.
- 1.7 Basic scientific knowledge essential to practice medicine at the primary level of health, dealing with health problems commonly met- with- in clinical practice with proper awareness of the social and community contexts of health care .
- 1.8 Decision making in different ways in anaesthetic problems management.
- 1.9 Using the available recourses to achieve the best value.
- 1.10 Show adequate understanding in community development& to shed light in national & international changes.
- 1.11 Basic scientific knowledge essential for following the rules of medical ethics.
- 1.12 Lifelong learning competencies necessary for continuous professional development.

٢- هدف المقرر:





٣- المستهدف من تدريس المقرر:





2.a.1 Recognize the principles & hypothesis of	أ- المعلومات والمفاهيم :
anaesthetic problem with surveillance and	
screening of all related topics.	والمفاهيم :
2.a.2 Identify the Principles & the organization of the	
Egyptian health care system, the importance of	
responsiveness to changes in healthcare policy.	
2.a.3 recognize the updates in the field of	
anaesthesia.	
2.a.4. Identify the principles that govern ethical	
decision making in clinical practice, the scope and	
impact of human rights law on persons and groups as	
well as the medico-legal aspect of medical	
malpractice and common medical errors.	
2.a.5 Identify the principles of quality management in	
the field of anaesthesia.	
2.a.6 Identify the basics & ethics of scientific research	
in field of anaesthesia.	





2.b.1 Analyze, assess & combine the information of clinical and investigational database to be proficient in clinical problem solving.

ب- المهارات

ذهنية:

Generate a list of initial diagnostic hypothesis 2.b.2 (differential diagnosis) for each problem with any shortage in information.

Combine all sources of information in addition 2.b.3 to the patient interview to interpret and evaluate the medical history. Such sources include family

or friends, medical records and other health care professionals, to overcome limitations regarding information.

2.b.4 Interpret patient symptoms and physical findings in terms of their anatomic, pathologic and functional diagnostic significances.

b.5 Decision making in various anaesthetic 2 problem.





2.c.1.a Utilize the basic professional skills of clinical as inspection, palpation, percussion and auscultation in detecting the general & local physical abnormalities for preoperative assessment

2.c.1.b Utilize the basic professional skills of ECG and to interpret the normal & abnormal findings. 2.c.1.c Perform & interpret all clinical assessment to recognize normal & abnormal findings.

- 2.c.1.d Perform basics of general and regional anaesthesia.
- 2.c.1.e Perform basics of routine technical procedures both diagnostic and therapeutic.
- 2.c.2 a prescribe & evaluate the medical reports
- 2.c.2.b Write safe prescription for different types of drugs

especially in the acute conditions and life threatening situation.

2.c.3 Evaluate the tools & ways of education in anaesthesia.

ج- المهارات المهنيةالخاصة بالمقرر:





2.d.1 Useful communication with different categories

2.d.2 Use technology resources to in reach the workshops in anaesthesia

2.d.3 self-learning & evaluation to detect education needs .

2.d.4a Use the sources of biomedical information and communication technology to remain current with advances in knowledge and practice.

2.d.4.b Apply the principles of statistical methods for collection, presentation & analysis of all types of data.

2.d.5 roles to evaluate the work of others

2.d.6 Work effectively as a member or a leader of an interdisciplinary team and

2.d.7. use the available time with smart manner

2.d.8. Establish life-long self-learning required for continuous professional development.

. - المهارات

العامة:





٤- محتوى المقرر:

• Introduction

History of Anesthetic Practice Ethical Aspects of Anesthesia Care Legal Aspects of Anesthesia Care

• Anaesthetic physiology

Sleep, Memory, and Consciousness

The Autonomic Nervous System

Cerebral Physiology and the Effects of Anesthetic Drugs

Neuromuscular Physiology and Pharmacology

Respiratory Physiology

Cardiac Physiology

Renal Physiology

Hepatic Physiology

- Anaesthetic pharmacology
- Anaesthesia management

Risk of Anesthesia

Preoperative Evaluation

Patient Positioning and Anesthesia

Neuromuscular Disorders and Malignant Hyperthermia

Airway Management in the Adult

Spinal, Epidural, and Caudal Anesthesia

Intravascular Fluid and Electrolyte Physiology

Pediatric anaesthesia

- Postoperative care
- Critical care medicine

PRACTICAL CLASSES:

1- Basic anesthesia management of different disease 2-ICU and manual skills.





	٥- أساليب التعليم
METHODS USED: 1. Modified Lectures 2. Problem solving 3. Self learning 4. Small group discussions 5. Practical classes	0- أساليب التعليم والتعلم
	٦- أساليب التعليموالتعلم للطلاب ذوىالقدرات المحدودة
	القدرات المحدودة
	٧- تقويم الطلاب:





Students Assessment methods:			أ- الأساليب
A) ATTENDANCE CRITERIA: Faculty bylaws		أ- الأساليب المستخدمة	
B) Assessment TOOLS:			
Tool		Purpose (ILOs)	
Written		To assess knowledge &	
examination		intellectual skills.	
Oral examination	To assess knowledge,		
	intellectual skills& general&		
		transferable skills.	
MCQ	To assess knowledge,		
examination	intellectual skills, professional		
	& general& transferable skills.		
Short case	To assess knowledge,		
examination	intellectual skills, professional		
	& general& transferable skills.		
TIME SCHEDULE: Faculty bylaws			ب- التوقيت
Exam	Timing		
2- Secon	d part 1.5 year after passing the		
		first part	





Weig	hting	System:

SUMMATIVE ASSESSMENT:

Examination	Marks allocated	% of Total Marks
Final exam		
c- Written	250	71%
d- Oral	100	29%
Total	350	100%

The minimum passing & Passing grades (Faculty bylaws).

۸− قائمة الكتب الدراسية والمراجع :
 أ− مذكرات

Handouts of staff members in the department





1-clinical anesthesiology Barash: Paul G.Barash,Robert k. Stoelting, Bruce F. Cullen 2-clinical anesthiology Morgan: John F.ButterworthIV, David C.Macky,John D.Wasnick 3-Miller 2010:http://www.hermanmiller.com	ب- كتب ملزمة
	ج- كتب مقترحة
5-Websites: a-http://en.wikipedia.org/wiki/PubMed b-http://.sciencedirect.com/ c-http://www.oxfordjournals.org d- http://springer.com/medicine/anesthesiology/journal/12630 e-http://journals.lww.com/anesthesia- analgesia/pages/ f- http://blogs.nejm.org/now/index.php/tag/anesthesia	د – دوريات علمية أو نشرات الخ





أستاذ المادة: ..اد/سعد ابراهيم...... رئيس مجلس القسم العلمي: .اد/سعد ابراهيم.....