



**توصيف برنامج ماجستير الجراحة العامة
(عام 2013-2014)**

A- Basic information

- 1- **Name of the program:** Master of General Surgery.
- 2- **Nature of the program:** Multiple
- 3- **Departments responsible:**
 - General Surgery Department
 - Anatomy, Pathology, Physiology, Biochemistry, Microbiology and immunology, and Histopathology.
- 4- **Coordinator:** Prof. Gamal Saleh
- 5- **Internal evaluation of program specification:** Prof. Mohamed Mahmoud Mohammed
- 6- **External evaluation of program specification:** : Prof. Hussein Abd EL-Aleem Boshnak; Professor of general surgery, Ain Shams University
- 7- **Date of approval of program specification:**
 - Department council: 4/9/2013
 - Faculty council: 15/9/2013

B- Professional information:

1- Program aims:

The overall aims of the program are:

1. **Identify** Basic scientific knowledge essential to practice surgery 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.
2. **Produce** surgeons who are prepared to understand the basic scientific knowledge essential for establishing & maintaining good doctor/ patient relationship.



3. **Teach** students communication skills necessary for proper evaluation and management of health problems related to surgery.
4. **Apply** analytical and critical methods for appraisal of knowledge in the field of general surgery.
5. **Upgrade** students' abilities in Diagnostic & therapeutic protocols of surgical diseases and emergencies; as well as problem solving and decision making.
6. **Encourage** work in team as a member or leader and increase ability of management of scientific meetings.
7. **Appropriate** ethical and professional education necessary for demonstrating appropriate attitudes with colleagues which reflects integrity and sincerity.
8. **Provide** Lifelong learning competencies necessary for continuous professional development.
9. **Determine** professional problems and propose creative solutions to address them.
10. **Show** awareness of his role in community development and environmental preservation.
11. **Employ** available resources, develop them and find new resources.
12. **Teach** students all basic and specialized surgical skills and use the technological tools to improve their surgical practice.
13. **Make** students understand the physical signs and how to detect these signs.
14. **Teach** students the methodology of data collection and how to make a medical research.

2-Intended Learning Outcomes (ILOS):

2.a. Knowledge and Understanding:

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

2.a.1. Understand and memorize all the theories, fundamentals and the new knowledge in the anatomy, histology, biochemistry, microbiology, pharmacology, physiology, pathology and surgery of the diseases.

2.a.2. Recognize how to prepare the patient for surgery.

2.a.3. Know the history beside the methods of investigations of different diseases, etiology, pathogenesis, clinical features, diagnoses and complications of common and life threatening illnesses affecting the body



and each of its major organ systems, presenting throughout the age spectrum.

2.a.4. Discuss the best methods of treatments and the perfect time for surgical intervention.

2.a.5. Identify the basics of ethics, medico- legal aspects of health problems, malpractice and common medical errors.

2.a.6. Explain the impact of general surgery on environmental preservation.

2.a.7 Recognize the principles and methods of scientific research.

2.a.8 Recognize the principles and methods of quality in professional practice of general surgery.

2.a.9 Recognize the basic pre- and post-operative care as pain relief and palliative care.

2.a.10 Highlights on scientific development in the field of general surgery

2.b. Intellectual Skills:

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

2.b.1. Design a list of initial diagnostic hypotheses (differential diagnosis) for each problem.

2.b.2. Analyze 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.3 Asses risks in professional practice.

2.b.4. Construct a diagnostic hypothesis.

2.b.5. Correlate the application of medical statistics for collecting, presenting, analyzing and interpreting medical data precisely.

2.b.6. Interpret patient symptoms and physical findings in terms of their anatomic, pathologic and functional diagnostic significances and the use of these data for appropriate management.

2.b.7. Solve the diagnosis by appropriate instrumental& radiological and laboratory tests.

2.b.8. Construct the clinical and investigational database to be proficient in clinical problem solving.



2.b.9. Classify factors that place individuals at risk for disease or injury, to determine strategies for appropriate response.

2.b.10. Design an initial course of management for stabilization of patients with serious illnesses.

2.b.11. Establish lifelong learning in order to be able to retrieve, analyze, link, and evaluate relevant and current data from literature, using information technologies and library resources, in order to help writing a medical thesis and solving a clinical problem based on evidence (EBM).

2.b.12. Select the patient who needs an operation.

2.b.13. Balance the advantages and disadvantages of different surgical management methods.

2.c. Practical & professional Skills:

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

2.c.1. Manage first aid measures for injured and critically ill patients; **Take** a complete or focused history taking. . Assess the mental state of the patient; **Write** a management plan for common diseases and acute emergencies.

2.c.2. Write and evaluate medical and medico-legal reports professionally.

2.c.3. Perform routine technical and surgical procedures both diagnostic and therapeutic, **Identify** the principles of sterile techniques and infection control, **Perform** venipuncture and collect blood samples, **Insert** a cannula into peripheral veins, **Give** intramuscular, subcutaneous, intradermal and intravenous injections, and **apply** suturing of superficial wounds, **Demonstrate** competency in cardiopulmonary resuscitation and basic life-support, **Insert** a nasogastric tube and **Perform** bladder catheterization .

2.d. General and transferable skills:-

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

2.d.1. Use the sources of biomedical information and communication technology to remain current with advances in knowledge and practice.

2.d.2. Establish effective inter-personal relationship to communicate ideas and arguments.



2.d.3 Establish life-long self-learning required for continuous professional development.

2.d.4. Work within the rules and limits of knowledge and experience

2.d.5. Communicate respectively with all patients irrespective of their socio-economic levels & cultural or religious beliefs.

2.d.6. Manage Retrieve, and manipulate information by all means, including electronic means.

2.d.7. Present information clearly in written, electronic and oral forms.

2.d.8. Explain to the patient or the relatives the nature of illness and the plan of management.

2.d.9. Work in team in different professional situations.

2.d.10 Establish standards and indicators for assessing the performance of surgical personnel.

3- Academic Standards:

٣ - المعايير الأكاديمية للبرنامج:

- **Academic Standards of Master Program of General Surgery**, approved in department council June, 2013 and in faculty council September 354, June 2013. (ملحق ١)

4- Reference standards (benchmarks)

4 - العلامات المرجعية:

- **Academic reference standards (ARS), Master Program (March 2009)**, which were issued by the National Authority for Quality Assurance & Accreditation for Education. NAQAAE (ملحق ٢)

5- Program structure and contents:

a) Program duration: ٢ years

- **1st part:** - One Semester (6 months).
- **2nd part:** - Two Semester (1 year).
- **Thesis:** - One Semester (6 months).



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b) Program structure

- Total hours of program 40 credit hours
- Theoretical: 25 credit hours
- Practical: 15 credit hours
- University and faculty requirements: 6
- Logbook: 5

c) Levels and courses of the program:

الساعات المعتمدة	الكود	المقررات	البند
٦ ساعات	UNIV 601	للجامعة والكلية	متطلبات
٩ ساعات		يشمل الآتي:	الجزء الأول
٢ ساعة	<i>SURG 601</i>	مقرر علمي في الفسيولوجيا والكيمياء الحيوية	
٢ ساعة	SURG 602	مقرر علمي في التشريح الجراحي والهستولوجي والنمو الجنيني	
٢ ساعة	SURG 603	مقرر علمي وعملي في الباثولوجيا الجراحية العامة	
١,٥ ساعة	SURG 604	مقرر علمي وعملي في البكتريولوجيا	
٥ ساعات		تسجل بها أنشطة مثل حضور الندوات العلمية والمؤتمرات والدورات التدريبية وإجراء أبحاث إضافية	كراسة الأنشطة
١٢ ساعة		يشمل الآتي:	الجزء الثاني
١٢ ساعة	SURG 606	مقرر علمي وإكلينيكي في الجراحة العامة وفروعها	
٢ ساعة	SURG 607	مقرر علمي وعملي في الباثولوجيا الجراحية الخاصة	
٦ ساعات			رسالة ماجستير
٤٠ ساعة			الإجمالي

First part (one semester):

a- Compulsory courses:

Course Title	Course Code	NO. of Teaching hours per week			Total teaching hours/ One Semester
		Theoretical	practical	Total/W	
Physiology and Biochemistry	SURG 601	2		2	30
Anatomy Histology and Embryology	SURG 602	2		2	30
pathology	SURG 603	1.5	0.5	2	45
Microbiology	SURG 604	1	0.5	1.5	37.5
Total		6.5	1	7.5	142.5



b- Elective courses: none

c- Selective: none

Second part (2 semesters):

a- Compulsory courses:

Course Title	Course Code	NO. of Teaching hours per week			Total teaching hours / 2 semesters
		Theoretical	practical	Total/Week	
General surgery and its branches	SURG 606	8	4	12	12
Surgical Pathology	SURG 607	1.5	0.5	2	2
Total					

b- Elective courses: none

c- Selective: none

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

- كود أو رقم المقرر
- اسم المقرر
- المحتويات

(6): Program admission requirements

6 - متطلبات الإلتحاق بالبرنامج :

مادة (٤): **يشترط في قيد الطالب لدرجة الماجستير:

- أ- أن يكون حاصلًا على درجة البكالوريوس في الطب والجراحة من إحدى جامعات ج.م.ع أو على درجة معادلة لها من معهد علمي معترف به من الجامعة بتقدير جيد على الأقل.



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ب- يسمح للحاصل على الدبلوم وفقاً لنظام هذه اللائحة وبتقدير جيد على الأقل بتسجيل رسالة لاستكمال درجة الماجستير بشرط ألا يكون قد مر أكثر من ثلاث سنوات على تاريخ حصوله على درجة الدبلوم وبغض النظر على تقديره في درجة البكالوريوس.

ت- يسمح للحاصل على الدبلوم وعلى خلاف لنظام هذه اللائحة أن يسجل لدرجة الماجستير بشرط أن يكون تقديره في الدبلوم لا يقل عن جيد وبغض النظر عن تقديره في البكالوريوس.

(٢) أن يكون قد أمضى السنة التدريبية أو ما يعادلها (سنة الامتياز)

(٣) أن يتفرغ للدراسة لمدة سنة على الأقل في الجزء الثاني (فصلين دراسيين)

مادة (٥): يكون التقدم للقياد لدرجة الماجستير مرة واحدة في السنة خلال شهري يوليو وأغسطس من كل عام. تبدأ الدراسة لدرجة الماجستير في شهر أكتوبر من كل عام.

٧- القواعد المنظمة لإستكمال البرنامج : (طبقاً لما هو مذكور في اللائحة)

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.

مادة (٧): يشترط في الطالب لنيل درجة ماجستير التخصص في أحد الفروع الاكلينيكية والعلوم الطبية الأساسية:

- أ- حضور المقررات الدراسية والتدريبات الاكلينيكية والعملية والمعملية بصفة مرضية طبقاً للساعات المعتمدة.
- ب- أن يقوم بالعمل كطبيب مقيم أصلي أو زائر لمدة سنة على الأقل في قسم التخصص بالنسبة للعلوم الاكلينيكية.
- ت- أن ينجح في امتحان القسمين الأول والثاني.
- ث- اجتياز الطلب لثلاث دورات في الحاسب الآلي (دورة في مقدمة الحاسب – دورة تدريبية متوسطة – دورة في تطبيقات الحاسب الآلي) وذلك قبل مناقشة الرسالة.
- ج- اجتياز اختبار التوفيل بمستوى لا يقل عن ٤٠٠ وحدة وذلك قبل مناقشة الرسالة.

أن يقوم باعداد بحث في موضوع تقره الجامعة بعد موافقة مجلس القسم ومجلس الكلية ينتهي باعداد رسالة تقبلها لجنة التحكيم.



8- Students Assessment Methods: طرق وقواعد تقييم الملتحقين بالبرنامج - ٨

م	الوسيلة	مخرجات التعلم المستهدفة
1	Written examination (including case study)	To assess knowledge and understanding & intellectual skills: 2.a.1.....2.a.10, 2.b.1.....2.b.13
2	Oral examination	To assess knowledge and understanding, intellectual skills & General & transferable skills 2.a.1.....2.a.10, 2.b.1.....2.b.13, 2.d.1.....2.d.10
3	Practical & clinical examination	To assess knowledge and understanding, intellectual skills & General & transferable skills & practical and clinical skills: 2.a.1.....2.a.10, 2.b.1.....2.b.13, 2.d.1.....2.d.10, 2.a.1.....2.a.10, 2.c.1.....2.c.3
4	MCQ examination	To assess knowledge and understanding, intellectual skills: 2.a.1.....2.a.10, 2.b.1.....2.b.13

Final exam:

First part

إجمالي	الدرجة				الاختبار	المقرر
	إكلينيكي	عملي	شفهي	تحريري		
٥٠			٢٥	٢٥	اختبار تحريري مدته ثلاث ساعات + اختبار شفهي	فارماكولوجي
٢٠٠			٢٥+٧٥	٢٥+٧٥		التشريح الجراحي والهستولوجي والنمو الجنيني
١٥٠		٢٥	٥٠	٧٥		الباثولوجيا الجراحية العامة
٥٠		١٠	١٥	٢٥		البكتريولوجيا
١٥٠			٢٥+٥٠	٢٥+٥٠		الفسولوجيا والكيمياء الحيوية
٦٠٠						إجمالي الدرجة



Second part

إجمالي	الدرجة				الاختبار	المقرر
	عملي	إكلينيكي	نظري	تدريبي		
			٣٥٠ نظري + إكلينيكي + عملي	١٧٥ + ١٧٥	اختباران تدريبيان مدة كل منهما ثلاث ساعات + اختبار نظري + اختبار إكلينيكي	الجراحة العامة وفروعها
٧٠٠	إجمالي الدرجة					

10- Evaluation of Program:

10 - طرق تقويم البرنامج:

Evaluator	Tools	sample
Internal evaluator (s) مقيم داخلي	report	1 Report
External Evaluator (s) مقيم خارجي	report	1 Report
Senior student (s) طلاب السنة النهائية	Interview, questionnaires	all
Alumni الخريجون	Interview, questionnaires	Not less than 50% from the last 3 years
Stakeholder (s) أصحاب العمل	Interview, questionnaires	Representative samples from all sectors

المسئول عن البرنامج : أ.د/ جمال السيد صالح

التاريخ : 14/8/2013

التوقيع جمال السيد صالح



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الملحقات :

ملحق ١ : **Academic standard of the program**

ملحق ٢: المعايير القياسية للدراسات العليا الصادرة عن الهيئة (درجة الماجستير).

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

ملحق ٤ : مصفوفة اهداف ونواتج التعلم للبرنامج مع المعايير الأكاديمية للبرنامج.

ملحق ٥: مصفوفة المقررات مع البرنامج **Program-Courses ILOs Matrix**

ملحق ٦: توصيف المقررات



**ملحق ١ : Academic Reference for Master Degree in
General surgery**

1. Attributes of gratitude.

By the end of Master of General surgery program, the graduate should be capable of:

- 1.1. **Demonstrate** excellence in applications of the principles and methodologies of medical scientific research and the use of the available tools to apply it in the field of general surgery.
- 1.2. **Apply** analytical and critical methodology for the appraisal of knowledge in the field of general surgery and its specialties
- 1.3. **Apply** and Integrate specialized and related surgical knowledge, including all physical signs, to clinical and surgical practice
- 1.4. **Show** deep awareness of current and recent surgical problems and new surgical concepts in the field of general surgery
- 1.5. **Determine** general surgical problems and propose creative solutions to address them
- 1.6. **Practice** all basic and specialized surgical skills and the use of technological tools to serve his surgical practice
- 1.7. **Able** to lead work teams in different surgical situations and Communicate effectively with all members and other categories for achieving a proper doctor- patient relationship.
- 1.8. **Make** the suitable decisions in the light of available and acquired information and different context of general surgical practice.
- 1.9. **Employ** available resources effectively, develop them and work to find new resources to achieve high benefit and keep this benefit during surgical practice
- 1.10. **Do** his role in community development and preservation of environment in the light of world and regional changes
- 1.11. **Commit** integrity, sincerity and follow the ethical roles of medical practice (in general) and roles of general surgical practice.
- 1.12. **Commit** continuous self-development and continuous surgical learning.

2. Academic Standards.

2.1. Knowledge and understanding:

On successful completion of the program, the graduate should know and understand:

- 2.1.1. **Understand** and **memorize** all the theories, fundamental and new knowledge in anatomy, histology, pathology, and surgery of the disease



2.1.2. Demonstrate the mutual influence between general surgical practice and its impact on the environment.

2.1.3. Demonstrate the basics of ethics, medico- legal aspects of health problems, malpractice and common medical errors.

2.1.4. Recognize the principles and methods of quality in the field of the general surgery.

2.1.5. Recognize the principles and methods of scientific research.

2.1.6. Highlights on the scientific development in the field of the general surgery.

2.2. Intellectual skills:

On successful completion of the program, the graduate should be capable of:

2.2.1. Identify, Analyze and assess information in the field of general surgery and apply this information in problem solving

2.2.2. Solve specialized surgical problems in absence of complete data based on available information

2.2.3. Conduct surgical research study and write scientific thesis about specific surgical problems.

2.2.4. Link between knowledge of different surgical specialties and interpret it to solve surgical problems.

2.2.5. Assess risk of transmitted disease its complications and risks that may encountered during surgical procedures

2.2.6. Plan for the development of performance in the clinical and operative field

2.2.7. Make decisions either surgical or conservative during dealing with patients

2.3. Practical/Professional skills

On successful completion of the program, the graduate should be capable of:

2.3.1. Perform effectively all fundamental and recent surgical skills.

2.3.2. Write, and evaluate all medical, medico legal and patients follow up reports.

2.3.3. Evaluate established surgical methods and tools in the field of general surgery.

2.4. Communication and transferable skills:

On successful completion of the program, the graduate should be capable of:



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- 2.4.1 **Communicate** effectively to improve inter-personal relationships using different methods
- 2.4.2 **Use** information technology to get all information related to surgical practice
- 2.4.3 **Exercise** autonomy in self-evaluation and identify of his personal needs
- 2.4.4 **Use** different resources for surgical information and knowledge retrieval
- 2.4.5 **Develop** standards and indicators for assessing the performance of others
- 2.4.6 **Work** effectively in a surgical team as leader or member in various surgical situations.
- 2.4.7 **Manage** scientific surgical meetings and manage time effectively.
- 2.4.8 **Demonstrate** independent and continuous learning.

الاجتماع مجلس القسم بتاريخ 6/2013

رئيس مجلس القسم اد/ محمد مختار الشهاوى

اعتماد مجلس الكلية

16/6/2013



توصيف برنامج ماجستير الجراحة العامة

ملحق ٢ : المعايير القياسية الدراسات العليا ٢٠٠٩
الصادرة عن الهيئة القومية لضمان جودة التعليم والاعتماد
برامج ماجستير الدراسات العليا

١ - مواصفات الخريج

- خريج برنامج الماجستير في أي تخصص يجب أن يكون قادرا على :
- ١-١ إجادة تطبيق أساسيات ومنهجيات البحث العلمي واستخدام أدواته المختلفة
 - ٢-١ تطبيق المنهج التحليلي واستخدامه في مجال التخصص
 - ٣-١ تطبيق المعارف المتخصصة ودمجها مع المعارف ذات العلاقة في ممارسته المهنية
 - ٤-١ إظهار وعيا بالمشاكل الجارية والرؤى الحديثة في مجال التخصص
 - ٥-١ تحديد المشكلات المهنية وإيجاد حلول لها
 - ٦-١ إتقان نطاق مناسب من المهارات المهنية المتخصصة واستخدام الوسائل التكنولوجية المناسبة بما يخدم ممارسته المهنية
 - ٧-١ التوصل بفاعلية والقدرة على قيادة فرق العمل
 - ٨-١ اتخاذ القرار في سياقات مهنية مختلفة
 - ٩-١ توظيف الموارد المتاحة بما يحقق أعلى استفادة والحفاظ عليها
 - ١٠-١ إظهار الوعي بدوره في تنمية المجتمع والحفاظ على البيئة في ضوء المتغيرات العالمية والاقليمية
 - ١١-١ التصرف بما يعكس الالتزام بالنزهة والمصداقية والالتزام بقواعد المهنة
 - ١٢-١ تنمية ذاته أكاديميا ومهنيا وقادرا على التعلم المستمر

2- المعايير القياسية العامة

١-٢ المعرفة والفهم :

- بأنتهاء دراسة برنامج الماجستير يجب ان يكون الخريج على فهم ودراسة بكل من :
- ١-١-٢ النظريات والاساسيات المتعلقة بمجال التعلم وكذا في المجالات ذات العلاقة
 - ٢-١-٢ - التأثير المتبادل بين الممارسة المهنية وانعكاسها على البيئة
 - ٣-١-٢ التطورات العلمية في مجال التخصص
 - ٤-١-٢ المبادئ الاخلاقية والقانونية للممارسة المهنية في مجال التخصص
 - ٥-١-٢ مبادئ واساسيات الجودة في الممارسة المهنية في مجال التخصص
 - ٦-١-٢ اساسيات واخلاقيات البحث العلمي

٢-٢ المهارات الذهنية :

- بأنتهاء دراسة برنامج الماجستير يجب ان يكون الخريج قادرا على :
- ١-٢-٢ تحليل وتقييم المعلومات في مجال التخصص والقياس عليها لحل المشاكل
 - ٢-٢-٢ حل المشاكل المتخصصة مع عدم توافر بعض المعطيات
 - ٣-٢-٢ الربط بين المعارف المختلفة لحل المشاكل المهنية
 - ٤-٢-٢ اجراء دراسة بحثية او كتابة دراسة علمية منهجية حول مشكلة بحثية
 - ٥-٢-٢ تقييم المخاطر في الممارسات المهنية في مجال التخصص



توصيف برنامج ماجستير الجراحة العامة

- ٦-٢-٢ التخطيط لتطوير الاداء فى مجال التخصص
٧-٢-٢ اتخاذ القرارات المهنية فى سياقات مهنية متنوعة
٣-٢ المهارات المهنية
بانتهاى دراسة برنامج الماجستير يجب ان يكون الخريج قادرا على :
١-٣-٢ اتقان المهارات المهنية الاساسية والحديثة فى مجال التخصص
٢-٣-٢ كتابة وتقييم التقارير المهنية
٣-٣-٢ تقييم الطرق والادوات القائمة فى مجال التخصص
- ٤-٢ المهارات العامة والمنتقلة :
بانتهاى دراسة برنامج الماجستير يجب ان يكون الخريج قادرا على :
١-٤-٢ التواصل الفعال بأنواعه المختلفة
٢-٤-٢ استخدام تكنولوجيا المعلومات بما يخدم الممارسة المهنية
٣-٤-٢ التقييم الذاتى وتحديد احتياجاته التعليمية
٤-٤-٢ استخدام المصادر المختلفة لحصول على المعلومات والمعارف
٥-٤-٢ وضع قواعد ومؤشرات تقييم اداء الاخرين
٦-٤-٢ العمل فى فريق سياقات كهنية مختلفة
٧-٤-٢ ادارة الوقت بكفاءة
٨-٤-٢ التعلم الذاتى والمستمر



توصيف برنامج ماجستير الجراحة العامة

ملحق ٣: مصفوفة مضاهاة المعايير القياسية للدراسات العليا للهيئة لدرجة الماجستير
مع المعايير الأكاديمية المتبناة لبرنامج ماجستير الجراحة العامة

المعايير الأكاديمية المتبناة للبرنامج					المعايير الأكاديمية القياسية	
المهارات العامة	المهارات المهنية	المهارات الذهنية	المعارف والفهم	مواصفات الخريج		
				١	١,١	مواصفات الخريج
				٢	١,٢	
				٣	١,٣	
				٤	١,٤	
				٥	١,٥	
				٦	١,٦	
				٧	١,٧	
				٨	١,٨	
				٩	١,٩	
				١٠	1.10	
				١١	1.11	
				١٢	1.12	
			٢,١,١		٢,١,١	المعرفة والفهم
			٢,١,٢		٢,١,٢	
			٢,١,٣		٢,١,٣	
			٢,١,٤		٢,١,٤	
			2.1.5		2.1.5	
			2.1.6		2.1.6	
		٢,٢,١			٢,٢,١	المهارات الذهنية
		٢,٢,٢			٢,٢,٢	
		٢,٢,٣			٢,٢,٣	
		٢,٢,٤			٢,٢,٤	
		٢,٢,٥			٢,٢,٥	
		2.2.6			2.2.6	
		٢,٢,٧			٢,٢,٧	
	٢,٣,١				٢,٣,١	المهارات المهنية
	٢,٣,٢				٢,٣,٢	
	٢,٣,٣				٢,٣,٣	
٢,٤,١					٢,٤,١	المهارات العامة والمنقولة
٢,٤,٢					٢,٤,٢	
٢,٤,٣					٢,٤,٣	
٢,٤,٤					٢,٤,٤	
٢,٤,٥					٢,٤,٥	
٢,٤,٦					٢,٤,٦	
٢,٤,٧					٢,٤,٧	
٢,٤,٨					٢,٤,٨	



توصيف برنامج ماجستير الجراحة العامة





توصيف برنامج ماجستير الجراحة العامة

ملحق (٥) مصفوفة المعارف والمهارات للبرنامج الدراسي
(مصفوفة المقررات مع البرنامج)

Knowledge & Understanding										ILOs				Courses & codes				
2.a.10	2.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				
									*	SURG 601				Physiology and Biochemistry				
									*	SURG 602				Anatomy Histology and Embryology				
			*				*		*	SURG 603				pathology				
			*				*		*	SURG 604				Microbiology				
*	*	*	*	*	*	*	*	*	*	SURG 606				General surgery and its branches				
			*				*		*	SURG 607				Surgical Pathology				
Intellectual Skills										ILOs				Courses & codes				
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					Courses	
						*	*	*					SURG 601				Physiology and Biochemistry	
							*	*	*				SURG 602				Anatomy Histology and Embryology	
				*		*	*	*	*	*		*	SURG 603				pathology	
				*		*	*	*	*	*		*	SURG 604				Microbiology	
*	*	*	*	*	*	*	*	*	*	*	*	*	SURG 606				General surgery and its branches	
				*		*	*	*	*	*		*	SURG 607				Surgical Pathology	



توصيف برنامج ماجستير الجراحة العامة



Practical & Professional Skills							ILOs		Courses & codes
					2.c.3	2.c.2	2.c.1		
					*			SURG 601	Physiology and Biochemistry
					*			SURG 602	Anatomy Histology and Embryology
					*	*		SURG 603	pathology
					*	*		SURG 604	Microbiology
					*	*	*	SURG 606	General surgery and its branches
					*	*		SURG 607	Surgical Pathology

General and transferable										ILOs		Courses & codes
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			
			*	*					*	SURG 601	Physiology and Biochemistry	
			*	*						SURG 602	Anatomy Histology and Embryology	
			*	*			*		*	SURG 603	pathology	
			*	*			*		*	SURG 604	Microbiology	
*	*	*	*	*	*	*	*	*	*	SURG 606	General surgery and its branches	
			*	*			*		*	SURG 607	Surgical Pathology	



توصيف برنامج ماجستير الجراحة العامة



ملحق ٦: توصيف المقررات التابعة للبرنامج

Program courses

First part
Physiology and Biochemistry
Anatomy, Embryology and Histology
Pathology
Microbiology
Second part
General surgery and its branches
Surgical Pathology



توصيف برنامج ماجستير الجراحة العامة



جامعة بنها
كلية الطب البشرى
قسم الهستولوجيا الطبية

توصيف مقرر الهستولوجى والنمو الجنينى
لماجستير الجراحة العامة

بيانات المقرر	
الفرقة / المستوى : ماجستير جزء أول	اسم المقرر : الهستولوجى والنمو الجنينى الرمز الكودي : SURG 602
عدد الوحدات الدراسية : نظري 1 credit hour	التخصص : ماجستير الجراحة العامة
<ul style="list-style-type: none">• Advanced scientific knowledge essential to practice Histology & Cell Biology dealing with general surgery.• Advanced scientific knowledge essential for establishing & maintaining good researchers.• Advanced scientific knowledge essential for following the rules of medical practice.• Diagnostic, problem solving and decision making as well as communication skills necessary for proper evaluation and management of health problems & researches.• Appropriate ethical and professional education necessary for demonstrating appropriate attitudes with students and colleagues.• Lifelong learning competencies necessary for continuous professional development.• Research education as related to medical practice & more advanced scientific researches.• Advanced administrative skills necessary for delivery of research service.	١- هدف المقرر:
٢- المستهدف من تدريس المقرر : <i>By the end of the course, the student should be able to:</i>	



<p>2.a.1. Describe the normal structure and function of the human body cells at the level of its organ & system on the molecular level.</p> <p>2.a.2. Outline the L/M and E/M of different cell organelles.</p> <p>2.a.3. Flash light on properties, types and functional importance of epithelial tissues.</p> <p>2.a. 4. Explain the cell signaling & altered cell behavior.</p> <p>2.a.5. Recognize the altered development, growth, structure and function of the body cells.</p> <p>2.a.6. Explain physiological cell death.</p> <p>2.a.7. Discuss general features, structure of cardiac muscle putting in mind the intercalated discs, conducting system, and moderator band.</p> <p>2.a.8. Describe RBC'S histological structure and function, differential leucocytic count, platelets, haemopoises, myeloid tissue.</p> <p>2.a.9. Flash light on histological structure of the heart.</p>	<p>أ- المعلومات والمفاهيم :</p>
<p>2.b.1. Recall general characters, constituents, structure, types and staining properties of connective tissue proper and fibers.</p> <p>2.b.2. Analyze lymphatic organs according to histological structure and function.</p> <p>2.b.3. Assess cell types of oral cavity.</p> <p>2.b.4. Classify types, structure and organization of neuron, nerve cells & nerve fibers.</p> <p>2.b.5. Interpret general characters and types of muscle tissue.</p> <p>2.b.6. Select histological structure and function of granular and non granular leucocytes.</p> <p>2.b.7. Analyze General features, structure, types, development and ossification of bone tissue.</p> <p>2.b.8. Interpret myelination of CNS, PNS & types and structure of ganglia, synapses, neuralgia, regeneration and degeneration of neurons.</p>	<p>ب- المهارات الذهنية:</p>



<p>2.c.1. Show examples and sites of different epithelial tissues.</p> <p>2.c.2. Write report on types of connective tissue proper and sites.</p> <p>2.c.3. Master general features, types, organization, functional ultra structure of myofibrils& sarcomere, molecular structure of actin and myosin, muscle contraction, innervations of skeletal muscle.</p> <p>2.c.4. Write report on kidneys, ureters, urinary bladder, male & female urethera.</p> <p>2.c.5. Evaluate the digestive tube regarding general features (esophagus, stomach, small intestine, large intestine, appendix, rectum and anal canal.</p> <p>2.c.6. Diagnose general structure, histological structure and function of arteries, veins and specialized types.</p> <p>2.c.7. Perform study on histological features, types of cartilage cells, fibres and matrix.</p>	<p>ج- المهارات المهنية الخاصة بالمقرر:</p>
<p>2.d.1. Instruct study on modification of epithelial cell surfaces.</p> <p>2.d.2. Work a study on general structure, innervations, contraction of smooth muscles.</p> <p>2.d.3. Develop comparative study of three types of muscles and growth, regenerative ability of muscular tissue.</p> <p>2.d.4. Lead a study on endocrine system.</p> <p>2.d.5. Exercise study on structure, distribution of lymphoid tissue and vessels in addition to phagocytes and antigen presenting cells that are involves in immune system.</p> <p>2.d.6. Lead study on types, structure of nerve endings.</p> <p>2.d.7. Use study on arteriovenous connections regarding histological structure and functions.</p> <p>2.d.8. Develop recent studies on pancreas, liver and gall bladder regarding histological features.</p>	<p>د - المهارات العامة:</p>



توصيف برنامج ماجستير الجراحة العامة



SUBJECT	Lectures(hrs)	Total(hrs)	%of total	محتوى المقرر:
Cytology (human body cells, cytoplasmic organelles, inclusions, nucleus, DNA, RNA ,cell death)	1 hr.	1 hr.	6.7%	٣- محتوى المقرر:
Epithelium (Properties ,Types, Examples ,Functional importance ,Modification)	1 hr.	1 hr.	6.7%	
Connective tissue (general character , constituents ,structure , types ,staining properties ,types of connective tissue proper and site)	1 hr.	1 hr.	6.7%	
Cartilage (Types, histological features.)	1 hr.	1 hr.	6.7%	
Bone (General microscopic features , Types ,structure, sites, function , development and ossification.)	1 hr.	1 hr.	6.7%	
Blood (red blood corpuscles ,granular leucocytes , non granular leucocytes ,differential leucocytic count ,platelets, haemopoiesis myeloid tissue.)	1 hr.	1 hr.	6.7%	
Muscle (general features, skeletal ms, smooth ms, cardiac ms, comparative study on different types, growth and regeneration.)	1 hr.	1 hr.	6.7%	
Nervous system (Structure, types ,mylination of CNS&PNS ,nerve ganglia , synapses, degeneration and regeneration of neurons ,nerve endings, Neurglia.)	1 hr.	1 hr.	6.7%	
Urinary system (Kidneys, ureters ,urinary bladder, male urethra, female urethra.)	1 hr.	1 hr.	6.7%	
Endocrine system (Pituitary, Thyroid, Parathyroid ,Adrenal ,pineal body, islet's of pancreas, neuro-endocrine system.)	1 hr.	1 hr.	6.7%	
Immune system and lymphoid tissue (structure, distribution of lymphoid tissue and vessels ,lymphatic organs, mononuclear phagocytes , cells involved in the immune system ,antigen presenting cells)	1 hr.	1 hr.	6.7%	
Cardiovascular system (general structure and types of , arteries, veins,histological structure of specialized arteries &veins, arterio-venous connections, histological structure of Heart.)	1 hr.	1 hr.	6.7%	
Digestive system (Oral cavity, salivary glands, digestive tube , oesophagus, stomach ,small intestine ,large intestine ,appendix, rectum and anal canal, pancreas, liver & gall bladder.)	3 hr.	3 hr.	20%	
1. Modified Lectures 2. Tutorial 3. Seminars				٤- أساليب التعليم والتعلم
لا ينطبق				٥- أساليب التعليم والتعلم للطلاب ذوي القدرات المحدودة
				٦- تقويم الطلاب :



توصيف برنامج ماجستير الجراحة العامة



1. Written exams 2. Oral exams	أ- الأساليب المستخدمة
• At end of the first term	ب- التوقيت
• Written exam 25 • Oral exam 25	ج- توزيع الدرجات
٧- قائمة الكتب الدراسية والمراجع :	
• Lectures notes	أ- مذكرات
• Essential books (text books) - Department book - Junqueira`s Basic Histology: Text and Atlas, 2013 13 th ed. By Anthony Mescher, McGraw Hill Medical	ب- كتب ملزمة
• Recommended books: - Color Atlas and Text of Histology, 2013 6 th ed. By Leslie P. Gartner and James L. Hiatt, Lippincott Williams and Wilkins, North America. - Wheater`s Functional Histology: A text and color Atlas , 2013 6 th ed. By Barbara Young, Geraldine O`Dowd and Philip Woodford, Churchill Livingstone. - Histology: A Text and Atlas with correlated cell and molecular Biology, 2010 6 th ed. By Miichael H. Ross and Wojciech Pawlina, Lippincott Williams and Wilkins.	ج- كتب مقترحة
www.medscape.com. www.pubmed.com. www.emedicine.com/maint/cme.asp. www.science direct.com.	د - دوريات علمية أو نشرات

تاريخ مجلس القسم: ٢٠١٣/٩/٨

رئيس مجلس القسم: اد/ اميمة كامل



توصيف برنامج ماجستير الجراحة العامة



جامعة بنها
كلية الطب البشرى
قسم التشريح الادمى وعلم الاجنة

توصيف مقرر التشريح الجراحى
لماجستير الجراحة العامة

بيانات المقرر	
الفرقة / المستوى : ماجستير جزء أول	اسم المقرر : التشريح الجراحى الرمز الكودي : SURG 602
عدد الوحدات الدراسية : نظري 1 credit hour	التخصص : ماجستير الجراحة العامة
<ul style="list-style-type: none">To have fair knowledge about the anatomy of different organs for efficient surgical practice.To make the student able to imagine the surface anatomy of different body structure important for surgical application.To know the basics of surgical anatomy.To describe the embryogenesis of the different body organs and the emergence of various congenital anomalies.	١- هدف المقرر:
٢- المستهدف من تدريس المقرر :	
<i>By the end of the course, the student should be able to:</i>	



<p>2.a.1 Describe the morphology , location ,vasculature , innervations & relations of different parts of human body.</p> <p>2.a.2 Flash light the embryogenesis of different anatomical structures.</p> <p>2.a.3 Enumerate the anatomy of the branchial remnants</p> <p>2.a.4 State the anatomic complications of different surgical operations</p> <p>2.a.5 Outline the anatomical principles of different surgical operations.</p> <p>2.a.6 Explain the most common variations to give an idea for the clinical application.</p> <p>2.a.7 Outline the impact of fine structure of the anatomical components.</p> <p>2.a.8 Describe the details of surgical & applied anatomy.</p> <p>2.a.9 Discuss the surface anatomy of the visible and deeper structures of the body.</p>	<p>أ- المعلومات والمفاهيم :</p>
<p>2.b.1 Classify different types of abdominal wall and internal hernias</p> <p>2.b.2 Estimate the complications of different surgical operations</p> <p>2.b.3 Evaluate the impact of perihepatic collections</p> <p>2.b.4 Demonstrate the anatomy of retroperitoneal structures</p> <p>2.b.5 Link between the anatomy of urogenital diaphragm and its congenital anomalies</p> <p>2.b.6 identify the surgical anatomy of omenta and omental bursa</p>	<p>ب- المهارات الذهنية:</p>
<p>2.c.1 Apply the science of embryology on the development of various congenital anomalies</p> <p>2.c.2 Show the difference between the types of hernia</p> <p>2.c.3 Perform an imagination about the anatomical layers have to be opened in different abdominal incisions</p> <p>2.c.4 Evaluate the pelvic floor dysfunction and its effects.</p>	<p>ج- المهارات المهنية الخاصة بالمقرر:</p>
<p>2.d.1. Use the basic science of anatomy for understanding different surgical diseases.</p> <p>2.d.2. Develop a colored atlas showing different anatomical structures</p> <p>2.d.3. Exercise on simple drawing of surface anatomy diagrams</p> <p>2.d.4. Perform information by all means, including electronic means.</p>	<p>د - المهارات العامة :</p>



Subject	Lectures (hrs)	Total(hrs)	% of Total
Neck Thyroid Gland Parathyroid Glands Trachea at the Neck Salivary Glands Branchial Remnants Surgical and Applied Anatomy	1 hr.	1 hr.	6.7%
Thoracic Wall and Pleurae Embryogenesis and congenital anomalies Surgical and Applied Anatomy	1 hr.	1 hr.	6.7%
Breast Embryogenesis and congenital anomalies Surgical and Applied Anatomy Anatomic Complications of Mastectomy	1 hr.	1 hr.	6.7%
Mediastinum Thymus	1 hr.	1 hr.	6.7%
Diaphragm Embryogenesis and congenital anomalies Surgical and Applied Anatomy	1 hr.	1 hr.	6.7%
Abdominal Wall and Hernias Embryogenesis and congenital anomalies Surgical and Applied Anatomy Anatomic Complications of Abdominal Incisions Hernias of the Abdominal Wall and Surgical Treatment Anatomic Complications of Hernia Repair	2 hr.	2 hr.	13.3%



Peritoneum, Omenta, and Internal Hernias Embryogenesis and congenital anomalies Surgical and Applied Anatomy of the Peritoneum Surgical Anatomy of the Omenta and the Omental Bursa Perihepatic Collections Internal Abdominal Hernias Anatomic Complications Involving the Peritoneum and Omenta	1 hr.	1 hr.	6.7%
Retroperitoneum Embryogenesis and congenital anomalies Surgical and Applied Anatomy Great Vessels in the Abdomen Abdominal Aorta Inferior Vena Cava	1 hr.	1 hr.	6.7%
Pharynx Surgical and Applied Anatomy Esophagus Embryogenesis and congenital anomalies Surgical and Applied Anatomy Anatomic Complications of Esophageal Surgery Stomach Embryogenesis and congenital anomalies Surgical and Applied Anatomy Anatomic Complications of Gastric Surgery Small Intestine Appendix Surface anatomy Anatomical variations Large Intestine and Anorectum	2 hr.	2 hr.	13.3%



Liver Surgical and Applied Anatomy Surface anatomy Extrahepatic Biliary Tract and Gallbladder Surface anatomy Anatomical variations Pancreas Spleen Surface anatomy Adrenal Glands	2 hr.	2 hr.	13.3%	
Kidneys, Ureters and Urinary Bladder Surface anatomy Anatomical variations Male Genital System Testis, Epididymis, and Spermatic Cord Ductus Deferens (Vas) Potential Spaces above the Urogenital Diaphragm Scrotum Seminal Vesicles Ejaculatory Ducts Prostate Bulbourethral Glands of William Cowper Potential Spaces under the Urogenital Diaphragm Male Urethra Penis	1 hr.	1 hr.	6.7%	
Pelvis and Perineum Pelvic floor and its dysfunction	1 hr.	1 hr.	6.7%	
1. Modified Lectures 2. Tutorial 3. Seminars				٤ - أساليب التعليم والتعلم



لا ينطبق	٥- أساليب التعليم والتعلم للطلاب ذوي القدرات المحدودة
٦- تقويم الطلاب :	
1. Written exams 2. Oral exams	أ- الأساليب المستخدمة
• At end of the first term	ب- التوقيت
• Written exam 75 • Oral exam 75	ج- توزيع الدرجات
٧- قائمة الكتب الدراسية والمراجع :	
• Lectures notes	أ- مذكرات
• Essential books (text books) - Department books - Gray's Anatomy for students, 2013: 3rd ed. By Richard Drake, A. Wayne Vogl and Adam W.M Mitchell, Churchill Livingstone.	ب- كتب ملزمة
• Recommended books: - Last R.J: Anatomy Regional and Applied, 2011. 12 th ed. By Chummy S. Sinnatamby, the English society & Churchill Livingstone, Edinburgh and London. - Langman's Medical Embryology, 2011. 13 th ed. By Sadler T.W, Lippincott Williams and Wilkins, Philadelphia. - Clinically Oriented Embryology, 2001. 6 th ed. By Moore K. & Persaud T., Philadelphia, WB Saunders Company. - Carpenter's Human Neuroanatomy, 1996. 9 th ed. By Andre Parent and Malcom B. Carpenter, Lippincott Williams and Wilkins. - Human Embryology & Developmental Biology, 2013. 5 th ed. By Bruce M. Carlson, Saunders.	ج- كتب مقترحة
www.bfom.edu.eg.	د - دوريات علمية أو نشرات



توصيف برنامج ماجستير الجراحة العامة



جامعة بنها
كلية الطب البشرى
قسم الفسيولوجيا الطبية

توصيف مقرر الفيسيولوجيا
لماجستير الجراحة العامة

بيانات المقرر	
الفرقة / المستوى : ماجستير جزء أول	اسم المقرر : الفسيولوجيا الرمز الكودي : SURG 601
عدد الوحدات الدراسية : نظري 1 credit hour	التخصص : ماجستير الجراحة العامة
<ul style="list-style-type: none">Approaching to the detailed knowledge of human physiology.Facilitate understanding the clinical data for the student in the clinical practice.Develop skills associated with improved health care and health care services.Basic scientific knowledge essential to practice medicine at the primary level of health, dealing with surgical problems commonly met- with- in clinical surgical practice.Basic scientific knowledge essential for establishing & maintaining good doctor/ patient relationship.Basic scientific knowledge essential for following the rules of medical ethics.Diagnostic, problem solving and decision making as well as communication skills necessary for proper evaluation and management of surgical problems.	١- هدف المقرر:
٢- المستهدف من تدريس المقرر :	
<i>By the end of the course, the student should be able to:</i>	



<p>2.a.1. List according to priority the main functions of Thyroid gland hormones.</p> <p>2.a.2. Explain and describe Arterial blood pressure and its regulation.</p> <p>2.a.3. Flash light on Microcirculation.</p> <p>2.a.4. Discuss the different mechanisms of homeostasis and how to apply it in general surgery.</p> <p>2.a.5. Flash light on Venous circulation.</p> <p>2.a.6. Enumerate and discuss different types of Anemia.</p> <p>2.a.7. Discuss small intestinal motility and its control.</p>	<p>أ- المعلومات والمفاهيم :</p>
<p>2.b.1. Identify Water and electrolyte imbalance.</p> <p>2.b.2. Interpret clinical manifestations of Hemorrhage and shock.</p> <p>2.b.3. Classify different types of Edema.</p> <p>2.b.4. Demonstrate regulation of respiration.</p> <p>2.b.5. Analyze acid base balance.</p> <p>2.b.7. Plan role of parathyroid hormone, calcitonine and vitamin D in calcium homeostasis.</p> <p>2.b.8. Assess the normal structure and function of the human body at the molecular, biochemical, cellular, levels (including the principles of genetics), to maintain the body homeostasis.</p>	<p>ب- المهارات الذهنية:</p>
<p>2.c.1. Perform procedures as measuring pulse, respiratory rate and arterial blood pressure.</p> <p>2.c.2. Manage different types of hypoxia.</p> <p>2.c.3. Manage Hemorrhage and shock.</p> <p>2.c.4. Perform pulmonary function tests.</p> <p>2.c.5. Show action of supra cortical hormones and its role at regulation of arterial blood pressure.</p> <p>2.c.6. Evaluate Pain and Pain control system</p> <p>2.c.7. Apply role of platelets in hemostasis.</p>	<p>ج- المهارات المهنية الخاصة بالمقرر:</p>
<p>2.d.1. Develop general scheme for management of Hemorrhage and Shock.</p> <p>2.d.2. Use tests showing the molecular, biochemical, and cellular mechanisms that are important in maintaining the body's homeostasis.</p> <p>2.d.3. Use the functions of the Liver and biliary system that have role in general surgical diseases and conditions.</p> <p>2.d.4 Instruct students about causes and management of fever.</p>	<p>د - المهارات العامة :</p>



توصيف برنامج ماجستير الجراحة العامة



Subject	Lectures(hrs)	Total (hrs)	% of total	٣- محتوى المقرر:
1. Arterial blood pressure and its regulation	1hr.	1hr	6.7%	
2. Microcirculation & Venous circulation	1hr	1hr	6.7%	
3. Edema, Hemorrhage and shock	1hr	1hr	6.7%	
4. Anemia	1hr	1hr	6.7%	
5. Homeostasis & Platelets	1hr	1hr	6.7%	
6. Water, electrolyte & Acid base balance	1hr	1hr	6.7%	
7. Thyroid gland hormones	1hr	1hr	6.7%	
8. Suprarenal cortical hormones	1hr	1hr	6.7%	
9. Calcium homeostasis, Parathyroid hormone, Calcitonin & Vit D.	2hr	2hr	13.3%	
10. Regulation of respiration & Hypoxia	1hr	1hr	6.7%	
11. Small intestinal motility and its control	1hr	1hr	6.7%	
12. Liver and biliary system	1hr	1hr	6.7%	
13. Pain & Pain control system	1hr	1hr	6.7%	
14. Fever	1hr	1hr	6.7%	
1. Modified Lectures 2. Tutorial 3. Seminars				٤- أساليب التعليم والتعلم
				٥- أساليب التعليم والتعلم للطلاب ذوي القدرات المحدودة لا ينطبق
				٦- تقويم الطلاب :
1. Written exams 2. Oral exams				أ- الأساليب المستخدمة
• At end of the first term				ب- التوقيت



توصيف برنامج ماجستير الجراحة العامة



<ul style="list-style-type: none">• Written exam 50• Oral exam 50	ج- توزيع الدرجات
٧- قائمة الكتب الدراسية والمراجع :	
<ul style="list-style-type: none">• Lectures notes	أ- مذكرات
<ul style="list-style-type: none">• Essential books (text books)- Department books.- New Human Physiology: Text book in Medical physiology & pathophysiology; Essentials & clinical problems, 2007. 2nd ed. By Poul-erik Paulev, Lippincott Williams and Wilkins.	ب- كتب ملزمة
<ul style="list-style-type: none">• Recommended books:- Guyton and Hall Text book of medical physiology, 2010. 12th ed. By Arthur C. Guyton and John E. Hall, Saunders.- Ganong's Review of medical physiology, 2013. 25th ed. By Kim E. Barrett, Susan M. Barman, Scott Boitamo and heddwen brooks, McGraw Hill Medical.	ج- كتب مقترحة
<ul style="list-style-type: none">• www.jap.physiology.org.• www.physiologyonline.physiology.org/cgi/content	د - دوريات علمية أو نشرات

تاريخ مجلس القسم: ٢٠١٣/٩/٨

رئيس مجلس القسم: اد/ علاء التليس



توصيف برنامج ماجستير الجراحة العامة

جامعة بنها
كلية الطب البشرى
قسم الكيمياء الحيوية الطبية

توصيف مقرر الكيمياء الحيوية
لماجستير الجراحة العامة

بيانات المقرر	
الفرقة / المستوى : ماجستير جزء أول	اسم المقرر : الكيمياء الحيوية الرمز الكودي : SURG 601
عدد الوحدات الدراسية : نظري 1 credit hour	التخصص : ماجستير الجراحة العامة



<ul style="list-style-type: none">• Provide all students with a broad education in fundamental aspects of medical biochemistry and molecular biology;• Provide a sound knowledge and understanding of the biochemical importance of macro-, micronutrients, hormones and enzymes;• To enable the student to illustrate and/or describe the metabolic pathways of macronutrients and nucleotides;• Illustrate the contribution of the organs in metabolic process under different physiological circumstances.• To enable the student to understand the bioenergetics of the concerned metabolic pathways under different physiological circumstances and their integrator regulations with other working metabolic pathways.• Enable students to point out and understand the biochemical and the molecular basis of a range of diseases, their diagnosis and the development of therapies.• Acquire a critical understanding of the basic principles of molecular biology, different methods used in diagnosis of diseases.• Be familiar with biotechnology methods and their clinical implications and be able to explain some detailed examples.• Be able to devise and evaluate suitable experimental methods for the investigation of relevant areas of biochemistry and molecular biology.• To enable the student to describe major body fluids composition and their clinical impact.• Develop through a flexible and progressive structure, a range of subject-specific and transferable skills, including practical laboratory skills, self-management, information retrieval, communication and presentation skills, working with others, decision making and meeting deadlines, that equip students for future employment.	<p>١- هدف المقرر:</p>
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٢- المستهدف من تدريس المقرر :

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



<p>2.a.1 Describe the metabolic pathways of the three main dietary sources of energy: carbohydrates, fats and proteins, their digestion absorption, their oxidation to release energy.</p> <p>2.a.2 Explain the regulation of these pathways and the integration of their metabolism.</p> <p>2.a.3 State biochemical alteration in related metabolic disorders as DM ,hypercholesterolemia ,atherosclerosis and gout.</p> <p>2.a.4 Discuss the role of vitamins and enzymes required for different metabolic reactions in the human body in addition to the deficiency manifestation of each.</p> <p>2.a.5 Flash light the biochemistry of certain tissues like liver, kidney and muscles as well as the correlation of their composition to function in health and disease.</p> <p>2.a.6. Define the metabolism of the major minerals as calcium, phosphate and iron and trace elements regarding their functions and alterations in metabolic processes met with the deficiency or excess of these elements.</p> <p>2.a.7. Outline nucleic acid metabolism (DNA-RNA).</p> <p>2.a.8. Enumerate the general principles of genetic engineering and their application for the diagnosis and management of diseases.</p> <p>2.a.9. List the components of some body fluids e.g. blood, urine, semen, and CSF.</p> <p>2.a.10. Discuss heme and bilirubin metabolism and their various metabolic disorders.</p>	<p>أ- المعلومات والمفاهيم :</p>
<p>2.b.1 Interpret ABG(arterial blood gases) reports and blood pH regulation.</p> <p>2.b.2 Analyze normal &pathological glucose tolerance curve.</p> <p>2.b.3 Solve problems related to metabolic disturbances in a given case study report.</p> <p>2.b.4 Evaluate the action of various body hormones and plasma enzymes and their clinical correlation.</p> <p>2.b.5 Identify the biochemical and molecular basis of cancer.</p>	<p>ب- المهارات الذهنية:</p>
<p>2.c.1. Manage problems related to metabolic disturbances in a given case study report.</p> <p>2.c.2 Apply the values of different tumour markers in diagnosis and prognosis of various tumours.</p>	<p>ج- المهارات المهنية الخاصة بالمقرر:</p>



2.d.1 Use available resources to get data & knowledge. 2.d.2. Communicate properly with the staff members as well as with each other. 2.d.3. Work effectively in groups.					د - المهارات العامة :
					٣- محتوى المقرر:
Subject	Lectures (hrs)	Tutorials (hrs)	Total (hrs)	% of Total	
Blood pH regulation, acidosis and alkalosis	½	---	½	3.3%	
Major pathways of glucose oxidation	½	---	½	3.3%	
Blood glucose regulation, Glucose tolerance test, hyper- and hypoglycemia	½	---	½	3.3%	
Diabetes Mellitus, galactosemia & glycogen storage disease.	½	½	1	6.7%	
Plasma lipoproteins, hyperlipidemia	½	---	½	3.3%	
Cholesterol metabolism, hypercholesterolemia and Atherosclerosis	---	½	½	3.3%	
Lipotropic factors, fatty liver	½	---	½	3.3%	
FA oxidation, ketosis	½	½	1	6.7%	
Urea cycle, NPN compounds	½	---	½	3.3%	
Heme metabolism and hemoglobinopathies	½	---	½	3.3%	



توصيف برنامج ماجستير الجراحة العامة



Porphyria and Jaundice	½	½	1	6.7%
Insulin, steroid,thyroid and parathyroid hormones & their clinical correlation	½	½	1	6.7%
Plasma enzymes & their diagnostic values	----	½	½	3.3%
Vitamins & their deficiency manifestation	½	---	½	3.3%
Calcium & phosphate homeostasis, sodium, potassium, iron, iodine and their deficiency manifestation.	½	---	½	3.3%
Hyperuricemia & gout	½	----	½	3.3%
DNA structure, replication, transcription & Regulation of gene expression	½	---	½	3.3%
RNA structure, transcription and posttranscriptional modification	½	---	½	3.3%
DNA damage, mutation and repair	½	---	½	3.3%
Cell cycle & apoptosis	½	---	½	3.3%
Protein synthesis: translation and posttranslational modifications	½	---	½	3.3%
Recombinant DNA technology, blotting techniques and gene therapy.	½	---	½	3.3%
Biochemical and molecular basis of cancer	½	---	½	3.3%
Tumor markers	½	---	½	3.3%
Liver & kidney function tests	½	---	½	3.3%
Urine, blood, semen, CSF and milk: normal and abnormal constituents& their clinical relevance.	½	---	½	3.3%
1. Modified Lectures 2. Tutorial 3. Seminars				

٤ - أساليب التعليم والتعلم



لا ينطبق	٥- أساليب التعليم والتعلم للطلاب ذوي القدرات المحدودة
٦- تقويم الطلاب :	
1. Written exams 2. Oral exams	أ- الأساليب المستخدمة
• At end of the first term	ب- التوقيت
• Written exam 25 • Oral exam 25	ج- توزيع الدرجات
٧- قائمة الكتب الدراسية والمراجع :	
• Lectures notes	أ- مذكرات
• Essential books (text books) - Department books - Biochemistry: Lippincott's illustrated Reviews, 2013. 6 th ed. By denise R. Ferrier, Lippincott Williams and Wilkins, North America.	ب- كتب ملزمة
• Recommended books: - Harper's illustrated Biochemistry, 2012. 29 th ed. By Robert K. Murray, David A. Bender, Katween M. Botham, Peter J. Kennelly, Victor W. Rodwell and P. Anthony Weil, McGraw Hill Medical.	ج- كتب مقترحة
www.clinchem.org	د - دوريات علمية أو نشرات



توصيف برنامج ماجستير الجراحة العامة



جامعة بنها
كلية الطب البشرى
قسم الباثولوجيا

توصيف مقرر الباثولوجيا الجراحية
لماجستير الجراحة العامة

بيانات المقرر	
الفرقة / المستوى : ماجستير جزء أول	اسم المقرر : الباثولوجيا الجراحية الرمز الكودي : SURG 603
عدد الوحدات الدراسية : نظري 2 credit hours	التخصص : ماجستير الجراحة العامة
<ul style="list-style-type: none">• Good application of basic pathological knowledge essential for the practice of general surgery.• Providing basic and specialized services in relation with biopsy diagnosis in the practice of medicine and investigations.• Application of special knowledge & its integration with others that have relation with the special practice.• Awareness of the running problems as early tumor detection and diagnosis of most of human body system.• Diagnosis of practical problems as cases study and clinical assessments.• Having fundamental knowledge of medical disciplines related to their clinical applications & able to use different technological tools as computer in the field of general surgery.• Having acquired competency to be teacher, trainer, researcher and leader in the field.• Diagnosis, problem solving and decision making skills necessary for proper evaluation and management.• Development of recent tools & ways essential for medical practice.• Awareness of his role in the progress of society and govern the environment in the light of international & local changes.• Honesty and respect the practical rules.• Lifelong learning competencies necessary for continuous professional development.	١- هدف المقرر:



٢- المستهدف من تدريس المقرر :

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

<p>2.a.1. Flashlight the dissection of different types of biopsies.</p> <p>2.a.2 Define stem cells.</p> <p>2.a.3 Describe different circulatory disturbances.</p> <p>2.a.4 Explain cell response to injury and tissue repair.</p> <p>2.a.5 Discuss tissue deposits.</p> <p>2.a.6 List different diagnostic methods in pathology.</p> <p>2.a.7 Discuss different salivary gland diseases as inflammatory and neoplastic diseases.</p> <p>2.a.8 Flashlight on different hepato-biliary diseases.</p> <p>2.a.9 Discuss diseases of blood vessels either arteries or veins .</p> <p>2.a.10 Outline different bone diseases.</p> <p>2.a.11 Discuss prognostic factors of cancer breast.</p> <p>2.a.12 Discuss genitor-urinary tract tumors.</p> <p>2. a.13Flashlight on prostatic diseases as BPH and cancer prostate.</p> <p>2.a.14 Enumerate different pediatric congenital anomalies.</p>	<p>أ- المعلومات والمفاهيم :</p>
<p>2.b.1 Interpret disturbance of growth and neoplasm formation.</p> <p>2.b.2 Identify different developmental and genetic diseases.</p> <p>2.b.3 Assess risk of radiation.</p> <p>2.b.4 Identify principles of basic immunopathology.</p> <p>2.b.5 Analyze diseases of gastrointestinal system as regard clinical manifestations ,path physiology ,risk factors and management.</p> <p>2.b.6 Classify different endocrinal diseases.</p> <p>2.b.7 Plan for early cancer breast detection by different methods.</p> <p>2.b.8 Assess different testicular diseases as testicular tumors.</p> <p>2.b.9 Identify diseases of scrotum, seminal vesicle.</p> <p>2.b.10 Identify diseases of Lymph-reticular system & spleen.</p>	<p>ب- المهارات الذهنية:</p>
<p>2.c.1 Diagnose and manage cases of inflammation, granuloma and viral diseases</p> <p>2.c.2 Write report on impact of radiation on health and caused surgical diseases.</p> <p>2.c.3 Apply basic immunopathology.</p> <p>2.c.4 Evaluate and manage a case of lung tumor.</p> <p>2.c.5 Diagnose and manage breast diseases either benign lesions ,cysts , swellings, nipple discharge or cancer breast.</p> <p>2.c.6 Manage a case of testicular tumor.</p> <p>2.c.7 Examine a case of splenomegaly and lymphadenopathy.</p>	<p>ج- المهارات المهنية الخاصة بالمقرر:</p>



توصيف برنامج ماجستير الجراحة العامة



<p>2.d.1 Use of stem cells in different surgical diseases</p> <p>2.d.2 Work in team for proper assessment and management of hepato-biliary diseases.</p> <p>2.d.3 Exercise on use of different diagnostic methods in pathology.</p> <p>2.d.4 Instruct about action of different hormones and the impact of secretion disturbance.</p> <p>2.d.5 Communicate effectively with pathologist ,radiologist ,oncologist for proper management of breast diseases.</p>	<p>د - المهارات العامة :</p>
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توصيف برنامج ماجستير الجراحة العامة



Subject	Lectures (hrs)	Practical (hrs)	Total (hrs)	% of Total	٣- محتوى المقرر:
General Pathology					
Cell response to injury, Stem cells and repair, Tissue deposits	1hr.	1hr.	2hr	4.4%	
Inflammation ,Granulomas ,Viral disease	1hr.	1hr.	2hr	4.4%	
Disturbance of growth Neoplasia, Developmental and genetic diseases	1hr.	1hr.	2hr	4.4%	
Circulatory disturbances, Radiation Basic imunopathology	1hr.	1hr.	2hr	4.4%	
Diagnostic methods in pathology	1.5hr.	1.5hr.	3hr	6.7%	
Special Pathology					
Diseases of the Gastrointestinal system	3hr	3hr.	6hr.	13.3%	
Salivary glands.Lungs: tumors	2hr	2hr	4hr.	8.9%	
Diseases of Liver & biliary tract:	2hr	2hr	4hr.	8.9%	
Diseases of the Blood vessels, Endocrine	2hr	2hr	4hr.	8.9%	
Breast. Bone	3hr	3hr	6hr.	13.3%	
Urinary Tract tumors. Testis, prostate, scrotum, seminalvesicle	2hr	2hr	4hr.	8.9%	
Pediatric congenital anomalies, Diseases of Lymphoreticular system & spleen	2hr	2hr	4hr.	8.9%	
Types of biopsies.Diagnostic methods	1hr	1hr	2hr	4.4%	



توصيف برنامج ماجستير الجراحة العامة



1. Modified Lectures 2. Tutorial 3. Seminars 4. Small group discussion and case studies. 5. Practical sessions (histopathology slide lab-museum of pathology)	٤ - أساليب التعليم والتعلم
لا ينطبق	٥ - أساليب التعليم والتعلم للطلاب ذوي القدرات المحدودة
٦ - تقويم الطلاب :	
1. Written exams 2. Oral exams	أ- الأساليب المستخدمة
• At end of the first term	ب- التوقيت
• Written exam 75 • Oral exam 75	ج- توزيع الدرجات
٧- قائمة الكتب الدراسية والمراجع :	
• Lectures notes	أ- مذكرات
• Essential books (text books) - Department book. - Rapid Review pathology, 2013. 4 th ed. By Edward F. Goljan, saunders.	ب- كتب ملزمة
• Recommended books: - Robbins & Cotran pathologic Basis of disease, 2013. 9 th ed. By Vinay Kumar, Abul K. Abbas and Jon C. Aster, Saunders.	ج- كتب مقترحة
www.pathpedia.com www.pathmax.com	د - دوريات علمية أو نشرات

تاريخ مجلس القسم: ٢٠١٣/٩/٤

رئيس مجلس القسم: اد/ عبد اللطيف البلشي



توصيف برنامج ماجستير الجراحة العامة

جامعة بنها
كلية الطب البشرى
قسم الميكروبيولوجيا والمناعة الطبية

توصيف مقرر البكتريولوجيا
لماجستير الجراحة العامة

بيانات المقرر	
الفرقة / المستوى : ماجستير جزء أول	اسم المقرر : البكتريولوجيا الرمز الكودي : SURG 604
عدد الوحدات الدراسية : نظري 1.5 credit hour	التخصص : ماجستير الجراحة العامة
<ul style="list-style-type: none">To educate students about the basic features of general bacteriology, virology, microbial genetics and mycology and to provide students with an understanding of the immune system, its protective functions and its role in the patho-physiology of infectious and non-infectious diseases.To familiarize students with the common infections and diseases of medical importance, their microbial causes, as well as laboratory diagnosis, treatment, prevention and control of such diseases.To enable the students to practice the principles infection control.	١- هدف المقرر:
٢- المستهدف من تدريس المقرر : <i>By the end of the course, the student should be able to:</i>	



<p>2.a.1. Describe general bacterial morphology, physiology and genetics.</p> <p>2.a.2. Discuss the host parasite relationship and microbial pathogenesis.</p> <p>2.a.3. Explain the physiology of the immune system, its beneficial role, its interaction with tumors, its deficiency conditions, as well as its detrimental role in hypersensitivity, autoimmunity and transplant rejection</p> <p>2.a.4. Describe the morphology, culture, antigenic structure and virulence factors of microorganisms causing bactremia and sepsis.</p> <p>2.a.5. Flash light the most important skin ,venereal infectious ,fungal and antifungal and outline the diagnosis, treatment, prevention and control of the most likely organisms causing such diseases</p> <p>2.a.6. list the most important methods of decontamination, sterilization and principles of infection control.</p> <p>2.a.7. Define the basics of antimicrobial chemotherapy and resistance.</p> <p>2.a.8. Discuss the impact of molecular technology in microbiology and immunology.</p> <p>2.a.9. List sites of normal bacterial flora in the body</p>	<p>أ- المعلومات والمفاهيم :</p>
<p>2.b.1. Identify medically important bacteria based on microscopic examination of stained preparations.</p> <p>2.b.2. Identify culture media and biochemical tests commonly used for bacterial identification and distinguish positive and negative results.</p> <p>2.b.3. Classify various sterilization processes and simple infection control measures</p> <p>2.b.4 Classify viral vaccine and their role as anti viral immunity.</p>	<p>ب- المهارات الذهنية:</p>
<p>2.c.1. Show microscopic examination of medically important bacteria. based on stained preparations.</p> <p>2.c.2. Apply various sterilization processes and simple infection control measures</p> <p>2.c.3. Show different methods of viral replication, pathogenesis and laboratory diagnosis of them.</p>	<p>ج- المهارات المهنية الخاصة بالمقرر:</p>
<p>2.d.1 Instruct medical team how to select the best methods of diagnosis of suspected hospital acquired infection and blood borne infection.</p> <p>2.d.2. Develop awareness of medical team about methods of transmission, prevention and control of viral infection.</p> <p>2.d.3. Communicate with other health care professionals regardless their degrees or rank & the role and the contributions (top management, subordinate or colleague).</p> <p>2.d.4 Work counseling sessions for disinfection and sterilization for health care team individuals(doctors, nurses , workers,.....etc.).</p>	<p>د - المهارات العامة :</p>



توصيف برنامج ماجستير الجراحة العامة



٣- محتوى
المقرر:

Subject	Lectures (hrs)	Practical (hrs)	Total (hrs)	% of total
Bacterial Cell Structure Host parasite relationship Bacterial genetics (<u>application of recombination and gene therapy</u>) Antimicrobial chemotherapy Disinfection and Sterilization	2	3	5	13.3%
Staphylococci , streptococci, Pneumococci, Neisseria meningitides, Neisseria gonorrhoea Bacillus anthracis Corynebacterium diphtheria and Clostridium group	1	5	6	16%
<u>Mycobacteria</u> <u>Enteric Gram negative rods: (Coliform, Salmonella, Proteus, Serratia)</u> <u>Pseudomonas, Acinetobacter</u>	1	5	6	16%
<u>Actinomyces, Yersinia, Campylobacter, H.pylori, Haemophilus influenzae, Anaerobic Gm -ve bacilli</u> <u>Anaerobic Gm -ve cocci</u>	1	1	2	5.3%



توصيف برنامج ماجستير الجراحة العامة



Applied Microbiology: wound, burn, surgical site infection, venereal infectious Normal bacterial flora of the body, Infective endocarditis, Opportunistic infection, Blood born infection, Bacteremia & sepsis , Hospital acquired infections)	1		1	2.6%
General virology Structure Lab. Diagnosis (idea) Viral replication (idea) Antiviral chemotherapy Antiviral immunity Pathogenesis of viral diseases viral vaccines	2	2.5	4.5	12%
human immunodeficiency virus (HIV) hepatitis Viruses Herpesviruses Adenoviruses Oncogenic viruses	1		1	2.6%
General Mycology Antifungal agents Subcutaneous mycoses	2	3	5	13.3%



توصيف برنامج ماجستير الجراحة العامة



<p><u>Basic Immunology</u></p> <ul style="list-style-type: none">• <u>Cells of immune response.</u>• <u>Natural &acquired immunity.</u>• <u>Immune response.</u>• <u>Antigens,antibodies ,complement and cytokines.</u>• <u>Cell mediated immunity</u>• <u>MHC</u>• <u>Apoptosis&necrosis Superantigen</u>	2	3	5	13.3%	
<p><u>Special Immunology</u></p> <ul style="list-style-type: none">• Hypersensitivity• Autoimmune diseases• Immunodeficiency diseases• Tumor immunology• Transplantation immunology	2		2	5.3%	
Total	15	22.5	37.5	100	
<ol style="list-style-type: none">1. Modified Lectures2. Tutorial3. Seminars4. Small group discussion and case studies.5. Practical sessions					٤ - أساليب التعليم والتعلم
					٥ - أساليب التعليم والتعلم للطلاب ذوي القدرات المحدودة
					٦ - تقويم الطلاب :
<ol style="list-style-type: none">1. Written exams2. Oral exams					أ- الأساليب المستخدمة
<ul style="list-style-type: none">• At end of the first term					ب- التوقيت



توصيف برنامج ماجستير الجراحة العامة



<ul style="list-style-type: none">• Written exam 25• Oral exam 25	ج- توزيع الدرجات
٧- قائمة الكتب الدراسية والمراجع :	
<ul style="list-style-type: none">• Lectures notes	أ- مذكرات
<ul style="list-style-type: none">• Essential books (text books)- Department books- Jawetz Melnick & Adelbergs Medical Microbiology, 2012. 26th ed. By Geo brooks, Karen C. Carroll, Janel Butel and stephan morse, McGraw Hill Medical.	ب- كتب ملزمة
<ul style="list-style-type: none">• Recommended books:- Mackie and McCartney Practical Microbiology, 2007. 14th ed. By J. G. Collee, Elsevier Health sciences.- Lippincott's illustrated Reviews Microbiology, 2012. 3rd ed. By Richard A. Harvey and Cynthia Nau Cornelissen, Lippincott Williams and Wilkins.- Microbiology: An Introduction, 2012. 11th ed. By Gerard J. Tortora, Berdell R. Funke and Christine L. Case, Benjamin Cummings.	ج- كتب مقترحة
<p>www.phage.org/black09.htm www.microbe.org/microbes/virus_or_bacterium.asp www.bact.wisc.edu/Bact330/330Lecturetopics www.whyfiles.org/012mad_cow/7.html www.microbelibrary.org www.hepnet.com/hepb.htm www.tulane.edu/~dmsander/Big_Virology/BVHomePage.html www.mic.ki.se/Diseases/c2.html www.med.sc.edu:85/book/welcome.htm www.bioiogy.arizona.edu/immunology/microbiology_immunology.html</p>	د - دوريات علمية أو نشرات

تاريخ مجلس القسم: ٢٠١٣/٩/٨

رئيس مجلس القسم: اد/ وفاء الشافعي



توصيف برنامج ماجستير الجراحة العامة



جامعة بنها
كلية الطب البشرى
قسم الجراحة العامة

توصيف مقرر الجراحة العامة
لماجستير الجراحة العامة

بيانات المقرر		
الفرقة / المستوى : ماجستير جزء ثان	اسم المقرر : الجراحة العامة	الرمز الكودي : SURG 606
نظري 8 credit hours	عملى 4 credit hours	التخصص : ماجستير الجراحة العامة
فى فصلين دراسيين		



- To provide the educational experience necessary for further practice in the field of general surgery including general practice, residency programs, medical research, public health or health service administration through helping them.
- To identify Basic scientific knowledge essential to practice surgery 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.
- To produce surgeons who are prepared to understand the basic scientific knowledge essential for establishing & maintaining good doctor/ patient relationship.
- To teach students communication skills necessary for proper evaluation and management of health problems related to surgery.
- To apply analytical and critical methods for appraisal of knowledge in the field of general surgery.
- To upgrade students' abilities in Diagnostic & therapeutic protocols of surgical diseases and emergencies; as well as problem solving and decision making.
- To encourage work in team as a member or leader and increase ability of management of scientific meetings.
- To know ethical and professional education necessary for demonstrating appropriate attitudes with colleagues that reflects integrity and sincerity.
- To provide Lifelong learning competencies necessary for continuous professional development.
- To conduct research studies and formulate scientific papers.
- To master the principles and methods of scientific research.
- To raise students acquiring research education knowledge related to surgical practice & future development.
- To give students basic administrative skills necessary for delivery of health service.
- To employ available resources, develop them and find new resources.
- To prepare students who are able to acquire competences and experience to effectively manage patients with different common surgical diseases.
- To make students understand the physical signs and how to detect these signs.
- To increase awareness of role of graduate in community development.
- To increase awareness of current problems and new concepts in the field of general surgery for proper health service administration.
- To commit self-development and transfer of knowledge and experience to others.



توصيف برنامج ماجستير الجراحة العامة



٢- المستهدف من تدريس المقرر :

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



2. a.1. Describe the metabolic response to injury.
2. a.2. List different types of shock.
- 2.a.3. Explain indications of blood transfusion.
- 2.a.4. List complications of blood transfusion.
- 2.a.5 Flashlight on normal wound healing
- 2.a.6 Enumerate different abdominal incisions.
- 2.a.7 Outline the indications ,types and complications of drain insertion.
- 2.a.8 Discuss principles of anastomosis.
- 2.a.9 Discuss the risk factors for wound infection.
- 2.a.10 Flashlight on mis-use of antibiotics .
- 2.a.11 Define SSI and MODS.
- 2.a.12 Outline the principles of pediatric surgery .
- 2.a.13 Define NOTES.
- 2.a.14 State the importance of patient safety during surgical practice.
- 2.a.15 Discuss principles of diagnostic imaging techniques, advantages and disadvantages.
- 2.a.16 Flashlight on role of ultra-sonography, CT, MRI in trauma ,bone, soft tissue and common surgical clinical disease imaging.
- 2.a.17 Outline diagnostic and therapeutic role of GIT endoscopy.
- 2.a.18 Outline principles and benefits of tissue diagnosis.
- 2.a.19 Discuss pre-operative preparation of patient.
- 2.a.20 Enumerate causes of malnutrition.
- 2.a.21 Explain physiology of cerebral blood flow.
- 2.a.22 Enumerate different types and pathology of spinal injury.
- 2.a.23 Define abdominal compartmental syndrome..
- 2.a.24 Outline principles of fracture management.
- 2.a.25 Explain methods of calculation of fluid therapy in management of burn..
- 2.a.26. List deformities of musculoskeletal systems
- 2.a.27 List causes of dysphagia and how to manage.
- 2.a.28 Enumerate disorders of salivary glands .
- 2.a.29 Describe development and anatomy of thyroid and parathyroid glands
- 2.a.30 outline the pathway for clinical diagnosis of patient presenting with abdominal complaint.
- 2.a.31 List types of hernias and how to classify.
- 2.a.32. Describe anatomy and physiology of upper and lower GIT organs.
- 2.a.33 List types of esophageal perforations and motility disorders.
- 2.a.34. Flashlight on bariatric surgery outcome and complications
- 2.a.35. Explain management of pancreatitis.
- 2.a.36. Enumerate risk factors and hereditary disorders that predispose to colorectal cancer
- 2.a.37. Enumerate causes of painful anal conditions and how to manage.
- 2.a.38. List tumors of genitourinary systems.
- 2.a.39. Flashlight on BPH and cancer prostate and how to manage.
- 2.a.40. Flashlight on principles of organs transplantation.
- 2.a.41 List various types of venous disorders and their complications .
- 2.a.42 Discuss surgical audit.

أ- المعلومات
والمفاهيم :



<p>2.b.1 Classify wounds as regard types, wound closure and healing.</p> <p>2.b.2 Asses a case of contracture ,hypertrophic scar or keloid.</p> <p>2.b.3 Identify different types of tissue repair.</p> <p>2.b.4 Select surgical incisions according to langer`s lines.</p> <p>2.b.5 Select the suitable suture material.</p> <p>2.b.6 Classify wound infection according to sources and severity.</p> <p>2.b.7 Estimate the principles of antibiotic use and spectrum.</p> <p>2.b.8 Demonstrate different congenital malformations.</p> <p>2.b.9 Formulate informed consent and surgical ethics.</p> <p>2.b.10 Interpret different imaging methods and proper diagnosis of surgical diseases.</p> <p>2.b.11 Estimate methods of providence nutritional supports..</p> <p>2.b.12 Asses the priority of patient in early management of trauma.</p> <p>2.b.13 Identify principles of triage.</p> <p>2.b.14 Demonstrate primary and secondary survey of poly-traumatized patient.</p> <p>2.b.15 Interpret physiology of cerebral blood flow and pathology of raised intra-cranial tension.</p> <p>2.b.16 Identify types of cerebral injury and different surgical aspects.</p> <p>2.b.17 Classify facial fractures.</p> <p>2.b.18 Evaluate thoracic and abdominal injury as liver and spleen trauma and indications of thoracotomy and abdominal exploration.</p> <p>2.b.19 Classify fractures of extremities.</p> <p>2.b.20 Asses area and depth of burn.</p> <p>2.b.21 Classify skin flaps.</p> <p>2.b.22. Classify musculoskeletal, cutaneous and subcutaneous tumors and swellings and how to manage.</p> <p>2.b.23. Evaluate breast mass and how to manage.</p> <p>2.b.24. Classify pancreatic cysts and pancreatic neoplasm.</p> <p>2.b.25. Analyze hepato-billiary disorders and how to manage.</p> <p>2.b.26. Classify complications of splenectomy and list benefits of conservative splenectomy.</p> <p>2.b.27. Classify liver and splenic swellings.</p> <p>2.b.28 Plan management of appendicitis and appendicular tumors.</p> <p>2.b.29 .Plan for managements of genitor-urinary stones.</p> <p>2.b.30 Demonstrate methods of pain relief and different types of anesthesia.</p>	<p>ب- المهارات الذهنية:</p>
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<p>2.c.1. Manage a case of shocked patient. 2.c.2. Apply different types of sutures. 2.c.3. Perform different anastomoses either bowel as in low anterior resections or vascular. 2.c.4. Diagnose a case of anastomotic leak. 2.c.5 Show techniques of endoscopic use either upper GIT endoscopy or colonoscopy. 2.c.6 Manage post-operative complications. 2.c.7 Plan the selection criteria of day case surgery. 2.c.8 Examine trauma patient and initial resuscitation. 2.c.9 Perform necessary protocols for early stabilization of patients. 2.c.10 Manage a case of head trauma. 2.c.11 Plan for prevention of brain injury. 2.c.12 Examine a patient with facial injury. 2.c.13 Perform different techniques of burn treatment. 2.c.14 Plan for management of tissue loss. 2.c.15. Examine different systems and organs of the body. 2.c.16. Diagnose different types of bone and joint infection. 2.c.17. Manage acute and chronic limb ischemia. 2.c.18. Manage lymphoma and role of chemotherapy, radiotherapy and immunotherapy in treatment. 2.c.19. Diagnose gastric cancer and analyze the outcome of surgical intervention. 2.c.20. Manage of inflammatory bowel disease, their complications and their impact on life. 2.c.21. Manage coronary heart diseases.</p>	<p>ج- المهارات المهنية الخاصة بالمقرر:</p>
<p>2.d.1. Instruct students about the principles of diathermy, legasure and harmonic. 2.d.2 communicate effectively with physicians, pathologists ,radiologists and microbiologist for proper diagnosis of surgical diseases in tropics as amebiasis ,hydatid , T.B enteritis and tropical chronic pancreatitis. 2.d.3 Develop knowledge of pediatric oncology. 2.d.4 Develop the ability of screening and early detection of cancer as breast ,gastric and esophageal cancer. 2.d.5 Lead a work team for better diagnosis and management of malignancy. 2.d.6 Exercise on practical application of surgery. 2.d.7 Develop good working relationship and close collaboration with radiology department for proper use of diagnostic imaging in surgical practice. 2.d.8 Use of different types of skin grafts and flaps. 2.d.9. Communicate efficiently with the patient and learn how to take full history. 2.d.10 Instruct patient about the importance of self –breast examination.</p>	<p>د - المهارات العامة:</p>



Subject	Lectures (hrs)	Small group discussion	Practical (hrs)	Total (hrs)	% of Total
SURGICAL PRINCIPLES The metabolic response to injury Shock and blood transfusion Wounds, tissue repair and scars Basic surgical skills and anastomoses Surgical Infection Surgery in the tropics Principles of laparoscopic surgery Principles of paediatric surgery Principles of oncology Surgical audit and research Surgical ethics and law Patient safety	10hr	10hr	30hr	50hr	8.3%
INVESTIGATION AND DIAGNOSIS Diagnostic imaging Gastrointestinal endoscopy Tissue diagnosis	5hr.	5hr.	15hr	25hr	4.2%
PERIOPERATIVE CARE Preoperative preparation Anaesthesia and pain relief Care in the operating room Perioperative management Nutrition and fluid therapy Postoperative care Day Case Surgery	10hr	10hr	30hr	50hr	8.3%
TRAUMA Introduction to trauma Early assessment and management of trauma Emergency neurosurgery Neck and spine Extremity trauma Burns Plastic and reconstructive surgery	12hr	12hr	36hr	60hr	10%
ELECTIVE ORTHOPAEDICS History taking and clinical examination in musculoskeletal disease The spine Upper limb - pathology, assessment and management	10hr	10hr	30hr	50hr	8.3%



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HEAD AND NECK Cleft lip and palate: developmental abnormalities of the face, mouth and jaws Pharynx and neck Oropharyngeal cancer Disorders of the salivary glands	10hr	10hr	30hr	50hr	8.3%
BREAST AND ENDOCRINE The thyroid and parathyroid glands The adrenal glands and other abdominal endocrine disorders The breast	10hr	10hr	30hr	50hr	8.3%
CARDIOTHORACIC Cardiac surgery	3hr	3hr	9hr	15hr	2.5%
VASCULAR Arterial disorders Venous disorders Lymphatic disorders	12hr	12hr	36hr	60hr	10%
ABDOMINAL History and examination of the abdomen Abdominal wall, hernia and umbilicus The peritoneum, omentum, mesentery and retroperitoneal space The oesophagus Stomach and duodenum Bariatric surgery The liver The spleen The gall bladder and bile ducts The pancreas The small and large intestines Intestinal obstruction The vermiform appendix The rectum The anus and anal canal	20hr	20hr	60hr	100hr	16.7%
GENITOURINARY Urinary symptoms and investigations The kidneys and ureters The urinary bladder The prostate and seminal vesicles The urethra and penis Testis and scrotum	10hr	10hr	30hr	50hr	8.3%



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1- Modified Lectures(Group discussion- Problem solving- Brain storming) 2- Tutorial 3- Seminars 4- Clinical and practical lessons 5- Field training in university hospitals 6- Attending the department scientific conference, workshops and thesis discussion	٤- أساليب التعليم والتعلم
لا ينطبق	٥- أساليب التعليم والتعلم للطلاب ذوي القدرات المحدودة
٦- تقويم الطلاب :	
1- Written exams 2- Oral exams 3- Practical and clinical exams	أ- الأساليب المستخدمة
• At end of the third term	ب- التوقيت
• Written exam 350 (2 papers) • Oral exam 175 • Practical and clinical exams 175	ج- توزيع الدرجات
٧- قائمة الكتب الدراسية والمراجع :	
• Lectures notes	أ- مذكرات
• Essential books (text books) - Bailey & Love's practice of Surgery, 2013. 26 th ed. By Norman S. Williams, Christopher J. K. Bulstrode and P. Ronan O'Connell, CRC press.	ب- كتب ملزمة



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<ul style="list-style-type: none">● Recommended books:- Essential General surgical operations, 2007. 2nd ed. By R. M. Kirk and marc C. Winslet, Churchill Livingstone.- Current Medical Diagnosis & Treatment, 2013. 54th ed. By Maxine papadakis, stephen J. Mcphee and Michael w. Rabow, McGraw Hill Medical.- Clinical surgery, 2012. 3rd ed. By Michael M. Henry and Jeremy N. Thompson, Saunders.- Sabiston text book of surgery: The biological basis of modern surgical practice, 2012. 19th ed. By Courtney M. Townsend, R. David Beauchamp, b. Mark Evers and Kenneth L. Mattox, Saunders.	ج- كتب مقترحة
<p>www.general.surgery.ucsf.edu www.gsasa.com</p>	د - دوريات علمية أو نشرات

رئيس مجلس القسم: اد/ محمد مختار الشهاوى تاريخ مجلس القسم: ٢٠١٣/٩/٤