



National Center for Quality Assurance and Accreditation of Educational and Training Institutions

Academic requirements for the academic program

General information

Educational Institution	University of Derna
College	Faculty Of Medicine
Department/Division Offering the Program	Department Of General Surgery
Name of the Educational Program	Master Of General Surgery
Academic Hours Required to Complete the Program	2442 hours
Academic Degree Awarded Upon Completion	Master Of General Surgery
Academic departments related to the program	Department of anatomy, Histology, Physiology, Pathology, Biochemistry, Microbiology and General Surgery
Language Used in the Educational Process	English
Program Coordinator	DR: Mohamed Bellail
External References for the Program	University of Benghazi
Date of Granting the Program's License to Practice	-
The authority that granted the license to practice	-
The actual start date of the study in the program	2023

1- Program objectives

The goal of MS course in Surgery is to produce a competent surgeon who has:

1. Acquired the competence pertaining to surgery that is required to be practised in the community and at all levels of health care system
2. Acquired the skills to manage the patients of trauma effectively.
3. Acquired skill in effectively communicating with patient and his attendants.
4. The desired surgical skills to independently operate on elective and emergency cases
5. Aware of the latest developments in the field of surgery
6. Oriented to principles of research methodology
7. Acquired skills in educating medical and paramedical professionals.

2- Targets

At the end of the MS course in surgery, the student should be able to:

- 1- Practice the specialty of surgery in keeping with the principles of professional ethics.
- 2- Recognize and identify the various surgical problems.
- 3- Institute diagnostic, therapeutic, rehabilitative and preventive.
- 4- measures to provide holistic care to the patient.
- 5- Take detailed history, perform full physical examination and make clinical diagnosis.
- 6- Perform relevant investigative and therapeutic procedures.
- 7- Interpret important imaging and laboratory results.
- 8- Independently perform basic surgical procedures.
- 9- Manage surgical trauma emergency efficiently.

- 10- . Demonstrate empathy and human approach towards patients and their families.
- 11- Demonstrate communication skills of a high order in explaining management and prognosis, providing counselling and giving health education to patients, families and communities.
- 12- Develop skills as a self-directed learner, recognize continuing educational needs, use appropriate learning resources, and critically analyze relevant published literature in order to practice evidence-based surgery.
- 13- Facilitate learning of medical/nursing students, practicing physicians, para- medical health workers and other providers as a teacher/ trainer.
- 14- Organize and supervise the desired managerial and leadership skills.

3-Comparing what is presented with external references ☐

1. University of Benghazi

4- Admission System ☐

- 1) Obtain M.B B.Ch from a recognized university.
- 2) Completing internship of 12 months.
- 3) The applicants should have spent at least two years in surgical practice after being graduated.
- 4) Provide two reference letters from two consultants recommending that the candidate is suitable for higher surgical training.
- 5) Signature of the candidate that he /she will abide by the rules and regulation of the training program or can be dismissed completely from the program.
- 6) The selected candidate will sign a declaration that he will be totally available of minimum of 4 days per week for one year after finishing the first part.
- 7) Regulations of Derna Faculty of Medicine Post Graduate Council will be followed.

5- Targeted learning outcomes ☐

All targeted learning outcomes should be written according to the program objectives, and each targeted learning outcome should be given a number or code so that it can be referred to.

A- Knowledge and understanding:

1	1) Integrate basic science knowledge-including anatomy, physiology and pathology to the practice of general surgery
2	2) Recognize the clinical manifestations, complications, diagnostic modalities, outcomes and treatment plans for common and/or important surgical problems, with special emphasis on emergencies and malignancies
3	3) Choose the proper methods of screening and early detection of cancer.
4	4) Recognize the ethical principles that govern decision- making in surgical practice.
5	5) Recognize medico legal aspects in surgical practice
6	6) Recognize the principles of preoperative preparation and postoperative care.
7	7) Recognize of research methodology.
	8) Define principles of clinical audit.

B - Mental skills: ☐



1	Perform and analyze a complete medical history and physical examination.
2	Perform and analyze an emergency-directed examination for patients with common surgical emergencies.
3	Utilize sources of information like medical records, patient's family/friends to augment medical history.
4	Interpret patient symptoms and physical findings in terms of their anatomic, pathologic and functional diagnostic significances.
5	Solve problems, and generate a list of differential diagnosis for each problem.
6	Select the most appropriate and cost-effective diagnostic and therapeutic procedure for each problem.

7	Interpret the results of commonly used diagnostic procedures
8	Use the results of all the tests ordered to modify the problem list and the differential diagnosis accordingly
9	Combine the clinical and investigational database, with the evidencebased knowledge and the skill of deductive reasoning to be proficient in clinical problem solving.
10	Evaluate the effectiveness of therapy by identifying clinical and investigative parameters to be used in assessing the patient's response to treatment and re-evaluate management plan accordingly.
11	Identify and select patients with life/organ- threatening surgical conditions and perform appropriate therapy.
12	Plan and properly present a research project.

C. Practical and professional skills:

1	Take and record a structured patient-centered history in acute and chronic conditions.
2	Perform full physical examination appropriate to age and gender in acute and chronic clinical conditions
3	Provide first aid measures (Resuscitate) for emergency patients; injured and /or critically-ill
4	Compose an initial plan of management for stabilization of injured and critically-ill patients
5	Construct appropriate management plan for patients with common and important surgical diseases
6	Order appropriate investigations.
7	Perform routine bedside procedures.
8	Apply the principals of Safety and infection control guidelines
9	Provide patient care in the preoperative and postoperative periods
10	Keep and properly present patient records
11	Search effectively electronic resources to help clinical problem solving
12	Apply basic surgical skills in the use of instruments and tissue handling.
13	Perform safely the expected surgical interventions at the end of the program

14	Prepare efficiently presentations and journal clubs
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D. General skills:

1	Conduct sincere and effective patient interviews, properly explain the condition and-plan of management, obtain informed consents and convey bad news in a professional way.
2	Adopt an empathic and holistic approach to patients and their problems, taking into consideration beliefs values, goals and concerns
3	Respect Patients confidentiality and deliver care in an honest, considerate and compassionate manner
4	Work as an effective and cooperative team member.
5	Communicate, consult and respect the role of other health- care providers.
6	Respect and follow the institutional code of conduct.
7	Apply the principles and ethics of research study.
8	Apply the ethical principles related to organ donation.
9	Explain professional errors in an honest way.

6- Components (contents) of the program**Number of weekly hours:**

Lectures	6h/w	Tutorials	2h/w	Bedside Teaching	8h/w
Clinical Meeting	2h/w	Journal Club	2h/w		
Case Presentation	2h/w	Total in average	22h/w		

7- Program requirements

1- General courses

Targeted learning outcomes to be covered (code)	Priorities	Number of hours/week for 17 weeks			units	Course name	Course code
		Training	Lab	Lectures			
A.1, A.2, B.1, C.1, D1		-	0	2	15	Anatomy	GIM-MS-ANA
A.1, A.2, B.1, C1		-	0	2	7.5	Histology	GIM-MS-HIS
A.1, A.2, B.1, D.1, D4		-	0	2	7.5	Physiology	GIM-MS-PHY
A.1, B.1, D.1, D4		-	0	2	7.5	Biochemistry	GIM-MS-BIO
A.1, A.5, B.1, D.1, D3, D4		-	0	2	7.5	Pathology	GIM-MS-PAT
A.1, A. 5, B.1, C.2, D.1, D4		-	0	2	7.5	Microbiology	GIM-MS-MIC
A.1, A.5, B.1, D.1		-	0	2	7.5	Pharmacology	GIM-MS-PHA
			0	14	67.5	Total	

2- Basic courses

Targeted learning outcomes to be covered (code)	Priorities	Number of hours/week for 17 weeks			units	Course name	Course code
		Training	Lab	Lectures			
				2	-	Research methodology 1	GIM-MS-RM1
				2	-	Research methodology 2	GIM-MS-RM2
				2	-	Biomedical statistics	GIM-MS-BS
				6		Total	

3- Specialized courses ☐

Targeted learning outcomes to be covered (code)	Priorities	Number of hours/week for 17 weeks			units	Course name	Course code
		Training	Lab	Lectures			
A.1, A.2, A.3, A.4, B.1, B.2, C.1, C.2, C.3, C.4, D.1, D.2		30 clinical hours/ week for 70 weeks	7	4 lecture hours/ week for 70 weeks		General Surgery	DMED. A015-03
		2100	7	200		Total	



4- Residency training program ☐

Targeted learning outcomes to be covered (code)	Minimum No. of cases	Course name	Course code
Output symbols are listed.	10 cases each	1. Tracheostomy 2. Chest tube insertion, 3. Suturing techniques 4. Catheterization, 5. Ryle's tube insertion, 6. Airway management, 7. Nasogastric feeding, 8. endotracheal intubation, 9. cardiopulmonary resuscitation, 10. venepuncture and establishment of vascular access, 11. Administration of fluids, 12. Blood, blood components, parenteral nutrition, 13. Common dressings, 14. Abscess drainage and basic principles of rehabilitation, 15. Bed sores management,	Therapeutic Skills: DMED-MS-1
	5 cases each	1. Observation of general	Surgical
		1- layout and working of OT 2- Understanding the importance of management and maintaining the sanctity of OT, 3- Scrubbing, working and sterilization of OT instruments, 4- Equipments eg electrocautery etc., 5- Laparoscopic Set, 6- Shifting of OT patients, 7- Pre operative work up of patients, 8- Acquisition of basic surgical skills to perform minor/medium surgeries independently (suprapubic cystostomy, Urethral Dilatation, Cystolithotomy, Varicocele, Orchidectomy, Ureterolithotomy, 9- Excision of Cyst & I&D, 10-Excision of Breast Lump, 11-Surgery of Hydrocele, 12-Appendectomy, 13-Herniotomy, 14-Hernia repair, 15-Umbilical hernia, 16- Exploratory laparotomy for perforation, 17-Haemorrhoidectomy, 18-Fistulectomy, 19-Fissurectomy 20-Circumcision and Skin grafting 21-Assist in major surgeries, 22-Handling of all types of surgical emergencies, 23-Post operative management of patient in recovery, ICU and ward, 24-Waste disposal.	Skills: DMED-MS-2

	270	Total
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8-Methods of teaching and learning

1. Seminar
2. Case Presentation
3. Journal Club
4. Clinical Meeting
5. Central session (held in hospital auditorium regarding various CPC, guest lectures, student integrated seminars,
6. Grand round,
7. Sessions on basic sciences, biostatistics, research methodology, teaching methodology, health economics, medical ethics and legal issues).
8. Illustrated lectures
9. Tutorials

9- Evaluation methods

Evaluation Method	Year/Semester
Part 1 MCQs exam (100 marks)	Part 1(at the end of 1 st year)
Part 2 MCQs exam (100 marks)	Part 2 (at the end of 3 rd year)
Part 2 clinical exam (100 marks) ○ One long case (40) ○ Two short case (20 each) Viva (20)	Part 2 (at the end of 3 rd year)
Thesis presentation	Master thesis

10-Program Evaluation

Ratio/number	Method	Evaluation Participants
	Questionnaire	Labor Market
	Questionnaire	Final-Year Students
	Exam Passing	Graduates
	Course Reports	Faculty Members
	Opinion Survey and Follow-up	External Evaluators

		Other Entities
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11- Evaluation classification ☐

Percentage	The term
< 65 %	Fail
65 %	Pass
65 % to less than 75%	Good
75 % to less than 85%	Very good
85 %- 100 %	Excellent

12- Requirements for continuing studies in the program

A - Theory Examination (Total= 400)

Papers:

Title /	Marks
Paper 1: Basic sciences as applied to Surgery	100
Paper 2: Principles and practice of Surgery	100
Paper 3: Operative Surgery	100
Paper 4: Recent advances in Surgery	100

B - Practical Examination and Viva voce (Total=400)

Long Case (s) – One	150
Short Case (s) -Three x 50	150

Evaluation Method	Year
MCQs exam (100 marks)	PART 1 (at the end of 1 ST year)
- MCQs exam (300 marks) - Part 2 clinical exam (300 marks) - One long case (150) - Three short cases (50 each)	PART 2 (2 nd and 3 rd year) at the end of 3 rd year. Get 65%
Thesis	Pass / no pass

13 - Education and learning resources and capabilities

1. Lectures
2. Clinical training in hospital
3. Books:
 - i. Bailey & Love's- Short Practice of Surgery
 - ii. Farquaharson's Text Book of General Surgery
 - iii. Current Surgical Diagnosis & Treatment
 - iv. S.Das Manual on Clinical Surgery
4. Reference Books
 - Hamilton Bailey Demonstration of Clinical signs & Symptoms in surgery
 - Emergency Surgery By Baily H
 - Dudley's Atlas of General Surgery
 - Pye's Surgical Handicraft
 - Mastery of Surgery by Baker R.J Vol. I & II
 - Schwartz-Principles of Surgery
 - Recent Advances, Tayler
 - Sabiston Text Book of Surgery, Part I & II
 - Maingot's Abdominal Operations
 - Oxford Text Book of Surgery Vol. I, II & III by Morris and Wood
 - S.Das Text Book on Surgical Short Cases
 - Mastery of Thoracic Surgery
 - Text Book of Hepatobiliary Surgery-Blumgart
 - Textbook Colorectal Surgery by Corman Marwin L.
 - Laparoscopic Surgery Technique-Darsi
 - Zollinger Atlas of Surgical Operation
 - Surgery of Alimentary Tract Vol 1 & 2 Shackelford
5. Journals
 - Annals of Surgery
 - Archives of Surgery
 - British Journal of Surgery
 - Journal of Neurosurgery
 - Journal of Neurosurgery : Spine
 - Journal of Neurosurgery: Pediatrics
 - Journal of Plastic , Reconstructive and Aesthetic Surgery
 - Journal of Trauma

- Journal of Urology
- Neurosurgery clinics of North America
- Plastic & Reconstructive Surgery
- Surgery
- Surgical Clinics of North America
- Urologic Clinics of North America
- Indian Journal of Surgery
- Journal of Minimal Access Surgery
- Journal of Indian Association of Paediatric Surgery
- Indian Journal of Burns
- Indian Journal of Thoracic and Cardio vascular Surgery
- Journal of Emergency Trauma and Shock Current problems in Surgery

14- Information that must be available

A list of faculty members, indicating their academic degree and specialization.



Name	Academic degree	specialization	Assigned tasks
Prof Mohamed Abdelrasool siAlgab	Full Professor	Surgery	Program Coordinator
Prof Mahmood Bassit Alshalwi	Full Professor	Surgery	Faculty Member
Prof Salah Yosef Habeel	Full Professor	Surgery	Faculty Member
Hamad Khairallah Rafe	Associate Professor	Surgery	Faculty Member
Ibrahim Hamad Alzawi	Assistant Professor	Surgery	Faculty Member
Aisha Mousa Bojazyah	Assistant professor	Surgery	Faculty Member
Khalid Ali Altashani	Lecturer	Surgery	Faculty Member
Mohamed Moftah Belil	Lecturer	Surgery	Faculty Member

- ❖ CVs of all program professors.
- ❖ Program schedule with the names of teaching professors and technicians.
- ❖ A list of research papers published by faculty members during the last two academic years.
- ❖ A list of consulting work carried out by faculty members, including the name of the person carrying out the consulting work.

- ❖ A list of the names of the staff assisting in implementing the educational process, including lecturers, teaching assistants, technicians, and administrators related to the educational program, with an explanation of the type of service provided by each of them and their number.
- ❖ CV of the staff assisting in implementing the educational process

15- Library

- The institution must specify the library or libraries at its disposal.
- The working days and hours of these libraries.
- Determine the loan requirements for books, references, and periodicals.
- Number of scientific periodicals in various specializations.
- Availability of electronic references and periodicals.
- Providing library regulations and lending systems for faculty members and non-student staff.
- Student services include providing academic material for lectures and laboratory lessons, whether electronic or otherwise.
- Number of computers available in the library for student and faculty use.
- References for all courses taught in the program.

16- Laboratories and laboratories

The institution must provide:

- The appropriate number of laboratories needed to implement the program.
- Operating and experimental materials.
- Supporting facilities, such as storage facilities, experiment preparation labs, etc.
- Educational equipment and materials appropriate to the program.

17-Appendices

The institution must attach a description of all coursework for the program as an appendix.

Program Coordinator: DR: Mohamed Bellail

Signature

Date:/...../.....