



(معهد معتمد للدراسات العليا في علوم الأورام)

Cairo University
National Cancer Institute
Anesthesia, ICU & Pain Relief Department

**SPECIFICATION OF
ALGESIOLOGY (MSc) PROGRAM
(ANA ALG 600)**

2024/2025

A. Administrative Information

Program Title: Algesiology

Degree: Master of Science

Department offering the program: Anesthesia, ICU, and Pain Relief

Coordinator: Prof. Dr Ghada Gamal

External Evaluator: Prof. Dr Ali Eissa (Al-Azher Faculty of Medicine)

Date of the most recent approval of program specifications by the Institute Council: Sep.2015, March 2022

B. Professional Information

1. Program Aims

The aims of the Algesiology Program are to provide the candidate with:

1. detailed anatomical, physiological, and biochemical aspects that enable him/her to understand the basic mechanisms of pain
2. knowledge and skills to be capable of accurate diagnosis and treatment of different pain syndromes.
3. principles of palliative and end of life care.

2. Intended Learning Outcomes (ILOs) of the Program

By the end of this program, the degree holder must be able to:

A. Knowledge and understanding:

- A1. explain the anatomic, physiologic, biochemical, and pharmacologic bases relevant to pain practice.
- A2. describe the different approaches to assessment and diagnosis of pain syndromes.
- A3. discuss the pharmacologic and nonpharmacologic methods of management of pain syndromes.
- A4. describe proper management of different systems' disorders in terminal ill-patients.
- A5. identify the value of research and other scholarly activity in relation to the development of the profession and patient care.

B. Intellectual skills

- B1. interpret physical, laboratory and radiological data
- B2. differentiate possible diagnoses.
- B3. plan treatment protocols and choose the most appropriate therapeutic modality.
- B4. design, report and interpret clinical research studies about treatments for pain

C. Professional and practical skills

- C1. demonstrate competence in proper history-taking and physical examination of the patients.
- C2. perform procedures for low back pain (epidural steroids, facet blocks, and sacroiliac joint block) and stellate ganglion block.
- C3. attend sympathetic blocks, neuraxial implants, vertebroplasty and radiofrequency techniques.
- C4. demonstrate an ability to establish safe environments for clinical practice, which minimize risk to patients, and others, including safe equipment operation, the use of hazard control and infection control procedures.
- C5. conduct evidence-based practice, evaluate practice systematically and participate in audit procedures.

- C6. demonstrate understanding of the requirement to adapt practice to meet the needs of different patient groups distinguished by, for example, physical, psychological, environmental, cultural or socio-economic factors.
- C7. change practice as needed to take account of new developments.
- C8. conduct fundamental or applied research.
- C9. apply ethical standards in pain management, palliative care and research.

D. General skills.

- D1. demonstrate an ability to gather and evaluate evidence and information from a wide range of sources.
- D2. demonstrate effective skills in communicating information, advice, instruction and professional opinion to colleagues, patients, their relatives and carers.
- D3. demonstrate, and, so far as possible, uphold, the rights, dignity and autonomy of every patient.
- D4. demonstrate and sustain professional relationships both as an independent practitioner and as a member of a team.

Graduates Attributes

The graduates of MSc of Algesiologi have the following qualities:

- They have the skills to accurately diagnose and treat different cancer and non-cancer pain syndromes
- They are experienced in interventional pain procedures; especially those of chronic back pain.
- They have the skills to properly manage terminally-ill patients in palliative care units.

3. Academic Standards

The Academic Standards are adopted from and the general academic reference standards for postgraduate studies published by the National Authority for Quality Assurance and Accreditation of Education NAQAAE, 2009.

The standards of the Accreditation Council for Graduate Medical Education (USA) ACGME, April 2006 are used as a benchmark. Benchmarking has, therefore, been restricted to the generic areas of activity.

Benchmark Statement

"Accreditation Council for Graduate Medical Education (ACGME)" in the United States

4. Curriculum Structure and Contents

a- Program duration: 3 years

b- Program Structure:

Credit Points Distribution:

| | |
|--|------------|
| Previous MSc or Diploma: | 40 |
| 1 st part course (Ana/Alg 601): | 6 |
| 1 st part scientific activity: | 3 |
| 2 nd part courses (Ana/Alg 602, 603,604): | 12 |
| 2 nd part scientific activity: | 4 |
| Practical training: | 70 |
| Thesis: | 20 |
| Total: | 155 |

5- Courses contributing to the program (see the matrix below)

| Title | Code | Credit Points | Tutorial | Practical | Program level |
|---|-------------|---------------|----------|-----------|----------------------|
| Applied Basics of pain management | Ana/Alg 601 | 6 | 6 | 0 | 1 st part |
| Clinical assessment & diagnosis of pain syndromes | Ana/Alg 602 | 4 | 2 | 2 | 2 nd part |
| Management of pain | Ana/Alg 603 | 6 | 4 | 2 | 2 nd part |
| Palliative care | Ana/Alg 604 | 2 | 2 | 0 | 2 nd part |

6. Program Admission Requirements

To be admitted to the Algesioly Master Degree Program, the candidate should have Diploma or Master Degree in any of the following specialties: Anesthesia, Orthopedics, Radiology, Neurology, Neurosurgery, Medicine, or Rheumatology from one of Egyptian Universities or acknowledged Universities (date of granting of MSc degree not exceeding 10 years at the time of admission). Program is open for new admissions during October and April each year.

7. Regulations for progression and Program completion

- Program duration is 3 years up to 6 years.
- The candidate must pass the 1st part exam at the end of 1st academic year.
- The candidate must pass the 2nd part exam at the end of 3rd academic year.
- The candidate should discuss and pass evaluation of his Thesis/Essay (after a minimum of 6 months in the 2nd part) to complete the program and to get the degree.

8. Student assessment

| Method | ILO measured |
|--|---------------------|
| 1-Part1 Written Exam. | A1,D1 |
| 2-Part1 Oral Exam | A1,D1 |
| 3- Part 2 Written Exam | A2-5, B1-4, D1 |
| 4- Part 2 Viva: Operative , oral and clinical Exam | C1-7,C9, D1-2, E1-2 |
| 5-Thesis discussion | C8,C9 |

A refers to knowledge and understanding ILOs, B refers to intellectual skills ILOs, C refers to professional and practical skills ILOs, D refers to general skills ILOs, and E refers to attitude ILOs; Number refers to ILO number under each A-E categories

9. Evaluation of the program ILOs

- Senior students
- Alumni (Graduates)
- Stakeholders (employers)
- External evaluators.

Program-Course ILOs Matrix

| Course | A1 | A2 | A3 | A4 | A5 | B1 | B2 | B3 | B4 | C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | D1 | D2 | D3 | D4 |
|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Applied basics of pain Ana Alg 601 | ■ | | ■ | | | | ■ | ■ | | | | | | | | | | | ■ | | | |
| Assessment & diagnosis of pain Ana Alg 602 | ■ | ■ | | | ■ | ■ | ■ | | | ■ | | | ■ | ■ | | | ■ | | ■ | ■ | ■ | ■ |
| Management of pain Ana Alg 603 | ■ | ■ | ■ | ■ | ■ | | | ■ | ■ | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Palliative care Ana Alg 604 | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Essay/ Thesis | | | | | ■ | | | | ■ | | | | | | | | ■ | ■ | ■ | ■ | ■ | ■ |

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We certify that the information required to deliver this program is contained in the above specification and will be implemented. All courses specifications for this program are in place

Program coordinator
Prof. Ghada Gamal

Head of Department
Prof Ghada El-Awady