

**In the Name of God  
Islamic Republic of Iran  
Ministry of Health and Medical  
Education Deputy Ministry of Education  
Tehran University of Medical Sciences  
Faculty of Paramedical Sciences**

**MASTER OF SCIENCE IN ANESTHESIA EDUCATION**

**Total Course Credits**

- **Core: 24 units**
- **Non-core (Elective): 2 units**
- **Dissertation:6 units**
- **Compensatory: 12 units**

**Program Description**

Anesthesiology major is one of the fields in medical sciences that students are required to improve their knowledge, attitudes and skills in the field of anesthesiology education in regard to the care of patients under general and regional anesthesia with modern methods of medical education .in addition students acquainted with teaching, evaluation, curriculum planning, etc. Graduates also play a role as instructors in the training center of continuous and discontinuous bachelor in the field of anesthesiology or other learners related field. Graduates of the discontinuous master's degree in anesthesiology education are not allowed to work independently in the field of anesthesia.

**Admission Requirements**

- Passing the entrance exam in accordance with the rules and regulations of the Ministry of Health and Medical Education
- Having a bachelor's degree in anesthesiology
- Enjoy complete physical and mental health

**Expected Competencies at the End of the Program**

Graduates of this field should provide their services in the educational centers implementing the anesthesia training program. The presence of graduates in this field will promote educational education in anesthesiology and subsequently improve the health of the community and the satisfaction of patients and recipients of services. Also, significant steps will be taken in the field of declining the morbidity and complications observing social justice in line with the vision documents of 14.4.

## **General Competencies\***

The general competencies expected for the graduates of this course are:

- Communication skills
- Theoretical, practical training
- Research and writing articles
- Critical thinking
- Problem solving skills
- Evidence-based management skills (planning, organizing, monitoring, monitoring and control, evaluation)
- Professionalism
- Statistical calculations

## **Specific Competencies and Skills**

Expected proprietary capabilities:

- Professional communication (Establishing effective communication with patients, patient companions, colleagues and officials in educational, medical, research centers)
- Education (Design and implementation of various educational programs and application of new educational methods and techniques, design and implementation of various educational evaluations and related processes, Participate in theoretical and practical training for anesthesia students and other departments as needed)
- Research (Providing scientific-research and written article of results to the relevant authorities)
- Patient care services (Providing all needed care services to patients at different stages of anesthesia, resuscitation, pain management and post-anesthesia care under the direct supervision of an anesthesiologist)
- Management (Educational management in educational, medical and research centers in the relevant field)
- Common related skills (Permitted practical skills are listed in Table C.)

## **Educational Strategies, Methods and Techniques**

This program is based on the following strategies:

1. Professional task-based learning
2. A combination of teacher and student centered
3. Problem-based learning
4. Community-based learning
5. Subject-based learning
6. Hospital learning
7. Evidence-based learning
8. Systematic learning

In this course, the following educational methods and techniques will be mainly used to:

- Collective teaching methods such as conference presentations
- Discuss in small problem-based and self-directed groups and lifelong learning, workshops, club journal, book reading
- Introduction of the individual case
- Morning report

- Practical training in the operating room and practical skills room
- Use of simulation and distance learning techniques such as well as specific role played in the field.
- Participate in lower level education
- Self Study , self education
- Interactive lecture
- Rain of thoughts
- Other educational methods and techniques according to educational needs and goals

### **Student Assessment (Methods and Types)**

#### **Evaluation method**

- MCQ,Essay
- Oral exam
- Objective structured clinical examination(OSCE)
- Objective structured practical examination(OSPE)
- Objective structured teaching examination(OSTE)
- Direct observational of procedural skills(DOPS)
- Case-based discussion(CBD)
- Port folio,logbook,
- Global rating scale(GRS)
- Multi source feedback(MSF)

#### **Frequency of evaluation:**

- Formative
- summative

### **Ethical Considerations\***

Learners are expected to:

- Strictly follow the legal charter (1) of patients
- Strictly follow the regulations related to the protection and safety of patients, staff and the workplace
- Strictly follow related to dress code
- Observe the relevant ethical rules when working with animals
- Protect the resources and equipment they work with under any circumstances
- Respect professors, peers and other learners and participate in creating a friendly and respectful atmosphere in the workplace
- Observe social and professional ethics considerations in critique of programs
- In conducting research related to the field, observe the research ethics points

**Tables of the Courses**

**Table 1. Compensatory Course**

No	Course Title	Credits			Teaching Hours			Prerequisite Or concurrent
		Theory	Practical	Total	Theory	Practical	Total	
1	Medical Information systems	0/5	0/5	1	9	17	26	
2	Learning Psychology	2	-	2	34	-	34	
3	Research Methods	1/5	0/5	2	26	17	43	4Simultaneous
4	Advanced statistics	0/5	0/5	1	9	17	26	4Simultaneous
5	Medical education based on the best evidence	1	-	1	17	-	17	3,4
6	Dedicated English language	2	-	2	34	-	34	
7	Educational leadership and management	1	-	1	17	-	17	
8	Instructional Design	1	-	1	17	-	17	9Simultaneous
9	Electronic learning	0/5	0/5	1	9	17	26	8Simultaneous
	total			12				

**Table 2. Core Courses\***

No	Title Of The course	Credits				Teaching Hours			
		Theory	Practical	the intern ship	total	Theory	Practical	the intern ship	total
10	Teaching-learning methods	1/5	0/5	-	2	26	17	-	43
11	Curriculum	0/5	0/5	-	1	19	17	-	26
12	Student evaluation methods	1/5	0/5	-	2	26	17	-	43
13	Advance safety and monitoring methods	2	-	-	2	34	-	-	34
14	Application of drugs in anesthetic procedure	2	-	-	2	34	-	-	34
15	Teaching the principles and techniques of anesthesia	1/5	0/5	-	2	26	17	-	43
16	Anesthesia 1	2	-	-	2	34	-	-	34
17	Anesthesia 2	2	-	-	2	34	-	-	34
18	intensive care	2	-	-	2	34	-	-	34
19	Patient introduction	1	-	-	1	17	-	-	17
20	Internship 1	-	-	2	2	-	-	102	102
21	Internship 2	-	-	2	2	-	-	102	102
22	Clinical Training internship	-	-	2	2	-	-	102	102

**Table 3. Non-Core Courses\***

No	Title of the Course	Credits			Teaching Hours			Prerequisites
		Theory	Practical	Total	Theory	Practical	Total	
23	Writing scientific texts in English	1	-	1	17	-	17	6
24	Project Management	1	-	1	17	-	17	-
25	Program evaluation	1	-	1	17	-	17	-
26	Entrepreneurship and creativity	1	-	1	17	-	17	-
	total	4						

\* Students have to pass..... credits based on their dissertation topics, and approval of their thesis adviser and postgraduate education council.