

## In the Name of God

### Islamic Republic of Iran Ministry of Health and Medical Education Deputy for Education

## Anesthesiology Degree: Specialty

### Introduction:

Anesthesiology is a branch of medicine in which the graduates will become competent in treatment and management (in specific distressing and life-threatening conditions), assessment, consultation, preparation of patients before anesthesia, general, regional or local, pain control and providing sedation, administration of anesthesia to patients during surgery/ obstetrical procedures and diagnostic-therapeutic measures, monitoring and maintaining the physiological balance of the patients before, during, and after surgery, caring and creating comfortable, safe, and satisfactory conditions for the patients undergoing diagnostic or therapeutic procedures with or without anesthesia, intensive care and vital support for critically ill patients, cardiopulmonary resuscitation, control of acute and chronic pain in the relevant educational field.

### Program duration: 4 years

### Admission Requirements

- Holding an MD degree
- Having passed the National Entrance Exam

### Expected Competencies at the End of the Program

#### General Competencies\*

#### Specific Competencies and Skills

At the end of the program learners will be competent in the following skills:

Procedural skills
1. Arterial line insertion
2. CV line insertion
3. Double-lumen endotracheal tube insertion using Fiberscope
4. Fiberoptic bronchoscopy
5. Fiberoptic intubation
6. Spinal anesthesia
7. Epidural block (lumbar area)
8. Epidural block (thoracic area)
9. Caudal block
10. Upper extremity block
11. Lower extremity block
12. Bier's block
13. Neonatal intubation
14. Adult intubation outside the operating room

15. Laryngeal mask airway (LMA) insertion and management
16. Pain management procedures
17. Childbirth without pain
18. (Transesophageal echocardiography) TEE
19. TPN
20. (Intraaortic balloon pump) IABP
21. Anesthesia outside the operating room, such as MRI and CT units, radiotherapy, radiology, and angiography wards, etc.
22. Anesthesia for Electro convulsive therapy (ECT)
23. Nasal intubation
24. Change ETT with and without tube changer
25. Non-invasive positive pressure ventilation
26. Bronchoscopy and bronchoalveolar lavage
27. *Check intraabdominal pressure in ICU
28. Sonography for insertion of pleural catheter
29. LP and check of CSF Pressure
30. tracheostomy
31. **Continuous Renal Replacement Therapy (CRRT)
32. Awake intubation
33. Using sonography for blocks and arteriovenous access

\* It is a technique for diagnosing Intraabdominal compartment syndrome

\*\* To protect the kidney function in complex operating rooms and ICU

## Educational Strategies, Methods and Techniques\*

### Student Assessment (Methods and Types)

#### I. Assessment Methods:

Students will be assessed by the following methods:

Written, oral, computer interaction test, OSCE, DOPS, CBD, Logbook assessment, 360-degree feedback, paper-based assessment, Portfolio assessment, GRF

#### II. Periods of Assessment

- Continuous (Formative)
- Annual
- Final examination (Summative)

## Ethical Considerations\*


\*Note: The related document(s) can be found at <http://hcmep.behdasht.gov.ir/>.

### The overall structure of the course:

Ward/Unit	Content	Duration
Operation Room/Recovery	Patients's Files Review and Examination, selecting Best Anesthetic Approach, Anesthesia Induction, Patients' Vital Signs, Monitoring and Care, Post anesthesia Care, monitoring in recovery,....	Daily
Internal Medicine Ward...	Examination and evaluation of: Pulmonary and Cardiovascular Diseases, Pulmonary Function Tests Interpretation, EKG, Introduction to Echocardiography and Angiography, Complicated Diabetic Cases Management, Renal Failure Management, Dialysis,...	2 months
ICU	Working with Ventilators, Oxygen Therapy, TPN, Care and Monitoring of the Patients, Consultation	6 months
Anesthesiology Consultation Room	Examination and Evaluation of referred Patients, laboratory or Paraclinical Test Request and interpretation, Request consultation or giving response to other colleagues' consultation requests	At least once a week
Pain Clinic	Introduction to pain Control Methods for acute and chronic pains , and performance of related procedures	2 months
Labor Pain Control Services	Introduction to pain Control During labor	1 months
Anesthesiology Services Out of Operation Room	Examination and evaluation of patients, sedation for other services procedures	1 month rotational
Community Medicine research centers or other research centers	Finalizing the research project	1 month
Optional Ward	One of the above mentioned wards	1month

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