

**ÜSKÜDAR UNIVERSITY FACULTY OF MEDICINE**

**4TH SEMESTER**

**ANESTHESIOLOGY AND REANIMATION INTERNSHIP GUIDE**

**4TH SEMESTER ANESTHESIOLOGY AND REANIMATION INTERNSHIP**

**1) 4TH SEMESTER ANESTHESIOLOGY AND REANIMATION INTERNSHIP AND DURATION:**

The anesthesiology and reanimation internship for the fourth-year students of Üsküdar University Faculty of Medicine aims to provide an in-depth understanding by focusing on critical areas of medical practice. This internship period aims to provide students with the opportunity to learn about anesthesia processes, the use of anesthesia drugs, pre-anesthesia evaluation of patients and their management during anesthesia. It also aims to provide them with an understanding of the basic principles of intensive care, follow-up of patients and emergency management. This internship, which aims to provide students with the skills to follow the anesthesia and intensive care processes of patients, to ensure their safety and to intervene, when necessary, combines clinical experience with theoretical knowledge and supports students to work safely and effectively in medical practices.

The Anesthesiology and Reanimation Internship, which was held for the fourth-year students of Üsküdar University Faculty of Medicine, includes the basic topics of areas such as anesthesia principles, critical patient care, intensive care and reanimation. This internship aims to provide students with an understanding of the basic principles of anesthesia practices, while also focusing on the management of critical patient situations and the understanding of intensive care processes. Anesthesiology and reanimation internship aims to provide students with the necessary knowledge and skills in these fields and to support the preparation process for medical practice.

The duration of anesthesiology and reanimation internship is 2 weeks.

**2) LEARNING OBJECTIVES OF 4TH SEMESTER ANESTHESIOLOGY AND REANIMATION INTERNSHIP**

**1. Principles and Practices of Anesthesia:**

**•** Learning the basic principles of anesthesia techniques and learning various methods.

• Understanding the care of patients before, during and after anesthesia.

**2. Critical Patient Care and Intensive Care:**

**•** Understanding the basic principles of intensive care and gaining knowledge about the management of critically ill patients.

• Gaining the ability to stabilize patients, provide respiratory support and maintain fluid balance.

**3. Reanimation Processes and Emergency Response:**

**•** Defining emergencies and learning reanimation protocols.

• Gaining the ability to intervene effectively in emergencies such as cardiac arrest and respiratory arrest.

**4. Patient Safety and Related Ethical Principles:**

**•** Learning the principles of ensuring the safety of patients.

• Improving the ability to protect patient privacy by respecting ethical rules.

**5. Team Collaboration and Communication:**

**•** Gaining the ability to communicate and cooperate effectively within the healthcare team.

• Developing the ability to work in coordination with other healthcare professionals in the care of patients.

**6. Medication Management and Monitoring:**

**•** Gaining the ability to understand the use of anesthesia drugs and to make dose adjustments.

• Improving the competence of monitoring and monitoring the vital parameters of patients.

**7. Evaluation of Emergency Scenarios:**

**•**  Learning how to act in the face of sudden complications and emergencies.

• Gaining the ability to develop fast and effective solution strategies for unforeseen emergencies.

**8. Patient Education and Information:**

**•**  Informing patients about anesthesia and reanimation processes and developing the ability to relax patients.

• Gaining the ability to convey the necessary information to the relatives of the patients.

**9. Evaluation of Clinical Conditions:**

**•**  Gaining the ability to analyze the clinical conditions of patients and create accurate anesthesia plans.

• Developing the ability to develop treatment strategies suitable for different disease scenarios.

**3) DUTIES OF THE INTERN:**

**Development of Basic Anesthesiology and Reanimation Knowledge and Skills:**

**•** The internship period aims to provide students with an understanding of ANESTHESIOLOGY AND REANIMATION imaging techniques and basic principles.

• It aims to provide the competence to distinguish different imaging methods and to understand basic radiological terms.

• Active participation in theoretical courses plays an important role in increasing knowledge and experience in the field of ANESTHESIOLOGY AND REANIMATION.

**Interpretation of Patient Images:**

**•** It aims to enable students to improve the ability to analyze radiological images.

• It supports the ability to understand the radiological results of patients and to predict possible pathologies.

**Patient Communication and Image Reporting:**

• It aimsto improve the ability to effectively share radiological results with patients and other healthcare personnel.

• It supports the ability to prepare radiological reports and keep records.

**Radiation Safety and Quality Control:**

**•** It aims to enable students to learn the principles of radiation safety and to understand the protection of patients and staff.

• It aims to enable students to comprehend the importance of quality control of radiological devices.

**Clinical Relationship and Image Assessment:**

**•** It aims to support patients' ability to link their medical history, symptoms, and clinical data with radiological findings.

• It encourages the use of images to assess the patient’s condition accurately and effectively.

**Team Collaboration and Reporting:**

**•** It aims to enable students to develop the ability to communicate and collaborate effectively with the radiology team.

• It supports the ability to share radiological reports with other health professionals.

**Critical Assessment and Decision Making:**

**•** It aims to enable students to improve the ability to make appropriate treatment or referral decisions by evaluating the radiological images of patients.

• It supports the ability to make quick and effective decisions for critical situations and emergencies.

**Continuous Learning and Updates:**

**•** Itaims to support the desire and ability to follow the developments in the field of medicine.

• It supports the ability to learn about and apply new radiological techniques and advances.

**4) LEARNING OUTCOMES OF 4TH SEMESTER ANESTHESIOLOGY AND REANIMATION INTERNSHIP**

Students who complete the anesthesiology and reanimation internship should have acquired the following competencies:

**1. Basic principles of anesthesiology and reanimation:**

 **-** Understanding the basic concepts in the field of anesthesiology and reanimation.

 - Learning about patient safety and anesthesia principles.

 - Comprehending the basic principles of critical patient care and intensive care.

**2. Patient assessment and preparation:**

 - Learning to evaluate patients' suitability for anesthesia.

 - Gaining the ability to evaluate the physical condition of patients before anesthesia.

 - Developing the ability to prepare and apply anesthesia protocols.

**3. Anesthesia management:**

 - Understanding the different methods of anesthesia.

 - Understanding the use and dosages of anesthesia drugs.

 - Gaining the ability to monitor and manage the anesthesia process.

**4. Cooperation in the process of surgery:**

 - Improving the ability to communicate effectively with the surgical team.

 - Contributing to patient care by working in harmony with the surgical team.

**5. Emergency management and reanimation:**

 - Gaining the ability to respond effectively in emergencies.

 - Gaining the basic principles of reanimation.

**6. Postoperative care and follow-up:**

 - Learning how to follow up patients after surgery.

 - Acquiring competence in recognizing and managing postoperative complications.

**7. Ethics and patient communication:**

 - Understanding patient privacy and ethical principles.

 - Developing the ability to communicate effectively with patients and their relatives.

**8. Use of advanced technology and equipment:**

 -Understanding the use of anesthesia devices and high-tech products.

 - Contributing to patient care by using technological tools effectively.

**9. Clinical thinking and decision-making:**

 - Learning how to create appropriate anesthesia plans by analyzing the patient's condition.

 - Gaining the ability to make effective decisions in emergencies and critical moments.

**10. Continuous learning and updating:**

- Gaining the desire to follow the developments in the field of anesthesiology and reanimation.

- Updating oneself constantly by learning new techniques and methods.

**5) LEARNING-TEACHING METHODS IN COURSES AND PRACTICES IN THE 4TH SEMESTER ANESTHESIOLOGY AND REANIMATION INTERNSHIP PROGRAM**

1. **Theoretical courses:**

In line with the aim of achieving internship qualifications, the courses attended by students to support the process of understanding and internalizing the necessary information are critical platforms where basic theoretical knowledge is shared and discussed. The course of the internship program is provided below:

**2. Independent Learning in the Clinic:**

 Within the weekly program, independent learning hours are specially reserved for students to make the most effective use of the opportunities offered in learning environments such as the Anesthesiology and Reanimation Clinic.

**6) 4TH SEMESTER ANESTHESIOLOGY AND REANIMATION INTERNSHIP TRAINING ENVIRONMENTS**

1. Classrooms, conference halls at the NP Health Campus
2. NP Hospital Radiology Clinic

**7) 4TH SEMESTER ANESTHESIOLOGY AND REANIMATION NUCLEAR DISEASES/CLINICAL PROBLEMS AND TARGETED LEARNING LEVELS**

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| **Learning Levels****Faculty of Medicine Graduates in Primary Health Care Service Delivery** |
| **A** | To be able to identify the emergency, make the first treatment, and refer them to a specialist when necessary. |
| **ÖnT** | In non-emergency situations, to be able to make a preliminary diagnosis and take the necessary preliminary procedures and direct them to the specialist. |
| **T** | To be able to diagnose and have information about the treatment, perform the necessary preliminary procedures and refer them to the specialist. |
| **TT** | To be able to diagnose and treat |
| **İ** | To be able to perform long-term follow-up (monitoring) and control |
| **K** | To be able to implement protection measures (primary, secondary and tertiary protections that are appropriate) |

**Core Diseases/Clinical Problems and Targeted Learning Levels**

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| --- | --- |
| **Diseases/Clinical Problems** | **Learning Level** |
| Drug side effects | **T-A-K-İ** |
| Fluid and electrolyte disturbances | **T-A-K** |
| Dehydration | **TT-A-K** |
| Frostbites | **A** |
| Sepsis | **A** |
| Shock | **A** |
| Foreign body related problems | **T-A-K** |
| Complications of transfusion of blood and its products | **T-A** |
| Anaphylaxis | **A-K** |
| Acid-base imbalances | **A** |
| Decompression sickness | **A** |
| Cardiopulmonary arrest | **A** |
| Respiratory failure | **A** |
| Trauma and injuries | **A** |
| Hypoglycemia | **A** |
| Allergic reaction | **TT-A** |
| Decompression sickness | **A** |
| Mechanical low back pain | **TT-K** |
| Adult basic life support | **ÖnT-TT-A** |
| Adult Advanced Life Support | **ÖnT-TT** |
| Pediatric basic life support | **ÖnT-TT** |
| Pediatric advanced life support | **ÖnT-TT** |
| Acute and chronic pain | **T-A-K-İ** |
| Treatment approaches in acute and chronic pain | **T-A** |
| Endotracheal intubation and airway management | **T-A** |
| Malignant hyperthermia | **T-A** |
| Brain death | **ÖnT-A** |

**Basic Medical Practices Learning Level**

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| --- | --- |
| Learning Level | Explanation |
| **1** | Ability to know how the application is done and explains the results to the patient and/or their relatives. |
| **2** | In case of an emergency, Ability to make the application in accordance with the guideline/directive |
| **3** | Ability to make the application in uncomplicated, frequent, situations/cases |
| **4** | Ability to make the application including complex situations/cases  |

**Basic Medical Practices**

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| --- | --- |
| **ANESTHESIOLOGY AND REANIMATION Internship Basic Medical Practices** | **Learning Level** |
| **Taking a Medical History** |
| Ability to take general and problem-oriented stories | 3 |
| **General and problem-oriented physical examination** |
| Evaluation of general condition and vital signs | 4 |
| Consciousness assessment | 4 |
| Examination of the respiratory system | 4 |
| **Record keeping, reporting, and notice** |
| Ability to clarify and obtain consent | 4 |
| Ability to prepare a patient file | 3 |
| Ability to prepare epicrisis | 4 |
| **Laboratory tests and other related procedures** |
| Ability to fill out the request form for laboratory examination | 3 |
| Ability to perform blood gas analysis | 4 |
| Ability to interpret the results of screening and diagnostic examinations | 3 |
| **Interventional and non-interventional applications** |
| Ability to apply Airway | 3 |
| Use of balloon masks | 4 |
| Hand washing | 4 |
| Evaluation of the Glasgow Coma Scale | 4 |
| Ability to provide first aid to remove a foreign body in the airway | 3 |
| Ability to receive arterial blood gas | 2 |
| Ability to open vascular access | 3 |
| Ability to apply basic life support | 4 |
| Ability to provide advanced life support | 3 |
| Ability to apply defibrillation | 4 |
| Ability to measure blood pressure | 4 |
| Ability to perform blood transfusions | 3 |
| Ability to intubate | 3 |
| IM, IV, SC, ID injection | 4 |
| Ability to prepare the drugs to be applied correctly | 4 |
| Ability to administer a nasogastric catheter | 1 |
| Ability to administer oxygen and nebule-inhaler therapy | 1 |
| Ability to apply and evaluate pulse oximetry | 4 |
| **Principles and practices of scientific research** |
| Ability to access current literature information and to read critically | 2 |
| Ability to apply the principles of evidence-based medicine in clinical decision-making | 2 |

**8) 4TH SEMESTER ANESTHESIOLOGY AND REANIMATION INTERNSHIP MEASUREMENT AND EVALUATION**

The end-of-internship assessment and evaluation methods and their contribution to the internship passing grade are as follows:

**1. Oral and/or written OSCE exam:**

The jury, consisting of at least two faculty members, organizes an oral and/or written OSCE exam that covers the learning objectives of the students during the internship period, including the knowledge obtained in the theoretical courses. This exam is an evaluation tool to evaluate the performance of students. The scores obtained according to the exam results constitute the entire internship grade.

**9) 4TH SEMESTER ANESTHESIOLOGY AND REANIMATION INTERNSHIP FEEDBACK**

On the last Friday when the Anesthesiology and Reanimation internship ends, and anonymous written feedback is requested from students after the completion of the exam. At this stage, students' evaluations are collected on issues such as the positive and negative aspects experienced during the internship, the performance of the faculty members and the effectiveness of the courses.