

## **Program Anesthesia Technician**

### **Course Specification of Critical Medicine**

**Course No. ( 01.02.847 )**

**2024**

| <b>IV. Course Content:</b>     |                               |                                                                                                                             |                        |                      |                          |
|--------------------------------|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------|------------------------|----------------------|--------------------------|
| <b>A – Theoretical Aspect:</b> |                               |                                                                                                                             |                        |                      |                          |
| <b>Order</b>                   | <b>Units/Topics List</b>      | <b>Sub Topics List</b>                                                                                                      | <b>Number of Weeks</b> | <b>Contact hours</b> | <b>Learning Outcomes</b> |
| 1                              | <b>1. Curriculum Overview</b> | <b>Purpose:</b> The curriculum aims to prepare trainees for a Certificate of Completion of Training (CCT) in Intensive Care | 4                      | 8                    | a2.a1                    |

Prepared by:

Reviewed by:

Head of the Depa

Quality Unit

:

Dean

Dr. Abdulhameed Al-Thaifani

Dr fares Mahdi

Dr .fares Mahdi

Dr.horia al sabri

Dr Abdulsalam Dallak.

|   |                        |                                                                                                                                                                                                                                                                                                                                                                                                                                    |   |   |             |
|---|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|-------------|
|   |                        | <p>Medicine, focusing on skills necessary for the assessment, resuscitation, and ongoing management of critically ill patients<sup>1</sup>.</p> <p><b>Stages of Training:</b><br/>Training is structured into three stages (Stage 1, Stage 2, Stage 3) that encompasses various practical and theoretical learning components over a progression of typically seven years, incorporating rotations through related specialties</p> |   |   |             |
| 2 | 2. Content of Learning | <p><b>Basic Science and Equipment:</b><br/>Understanding the anatomy and physiology related to intensive care,</p>                                                                                                                                                                                                                                                                                                                 | 4 | 8 | a1, b1, c1, |

|   |                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |   |   |                        |
|---|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|------------------------|
|   |                      | <p>alongside equipment usage.</p> <p><b>Patient Assessment and Management:</b><br/>Training on how to evaluate critically ill patients and implement management strategies<sup>4</sup>.</p> <p><b>Advanced Organ Support:</b><br/>Topics on respiratory support, hemodynamic monitoring, and nutritional support, including special considerations during transport of patients<sup>6</sup>.</p> <p><b>Emergency and Trauma Care:</b><br/>Addressing handling emergencies and trauma in the context of critical illness</p> |   |   |                        |
| 3 | Non-Clinical Modules | Research and Audit:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 3 | 6 | a2, b2, c1, c2, d1, d2 |

|   |                          |                                                                                                                                                                                                                                                                             |   |   |                                    |
|---|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|------------------------------------|
|   |                          | <p>Emphasis on understanding research methodologies, ethics, and the importance of clinical audit<sup>5</sup>.</p> <p><b>Clinical Governance:</b><br/>Managing quality control and ensuring compliance with safety and ethical guidelines in intensive care practices.</p>  |   |   |                                    |
| 5 |                          | <b>exam</b>                                                                                                                                                                                                                                                                 | 2 | 4 | a1, a2, c1, c2, d1, d2             |
| 6 | <b>Core Competencies</b> | <p>The curriculum highlights essential competencies grouped into categories including:</p> <p><b>Resuscitation:</b><br/>Skills for resuscitating patients experiencing life-threatening situations.</p> <p><b>Disease Management:</b><br/>Proficiency in the management</p> | 2 | 4 | a1, a2, a3, b2, b3, c1, c2, c1, d2 |

|  |                                                |                                                                                                                                                                                                               |    |    |                                    |
|--|------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----|------------------------------------|
|  |                                                | of acute and chronic health issues, including various organ failures.<br><br><b>Procedures:</b><br>Practical skills, including invasive techniques, ultrasound applications, and advanced ventilation setups. |    |    |                                    |
|  | Final exam                                     | Final exam                                                                                                                                                                                                    | 1  | 2  | a1, a2, b1, b2, b3, c1, c2, d1, d2 |
|  | <b>Number of Weeks /and Units Per Semester</b> |                                                                                                                                                                                                               | 16 | 32 |                                    |

#### V. Teaching strategies of the course

1. Lecture – Discussion
2. Demonstration
3. Student assignment
4. Role Plays
5. Brainstorming
6. Case study
7. Field work

#### V. Assessments strategies of the course

Assess role plays with the check-list on communication  
Assess communication techniques by rating scale

Assess performance with rating scale

## II. Course Description

|                                                                                                                                                                                                                     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>(مخرجات تعلم المقرر). Course Intended Learning Outcomes (CILOs) :</b>                                                                                                                                            |
| Demonstrates a working knowledge of critical care principles, including the physiological challenges faced by critically ill patients <sup>1</sup> .                                                                |
| emphasize the importance of collaborative practices among healthcare professionals, ensuring that learners can effectively work in teams to optimize patient care <sup>2</sup>                                      |
| . Practices practical skills, including invasive techniques, ultrasound applications, and advanced ventilators.                                                                                                     |
| <b>To assessments, synthesizing clinical data for treatment plans, recognizing the need for urgent care, and applying knowledge of shock states to guide resuscitation</b>                                          |
| encourage in-depth discussions regarding ethical dilemmas, informed consent, and family involvement in care decisions, emphasizing the moral responsibilities of healthcare providers in the intensive care setting |
| Learners participate in quality improvement projects and scientific research, thus contributing to the advancement of critical care practices                                                                       |
| C1 develop the ability to integrate various diagnostic modalities and treatment protocols for conditions commonly seen in the intensive care                                                                        |
| C2.to perform essential procedures such as intubation and manage ventilator settings for patients with respiratory failure                                                                                          |
| C3.Training includes recognizing signals of burnout and developing strategies for maintaining personal wellbeing whilst delivering high-quality patient care.                                                       |
| D1 Commitment to lifelong learning through engagement in surgical research, quality improvement                                                                                                                     |
| D2 evaluations, including history-taking, physical examination, and diagnostic test interpretation..                                                                                                                |

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

Republic of Yemen  
Ministry of Higher Education & Scientific Research  
**21 SEPTEMBER UMAS**  
Faculty of Medical Applied Science  
Unit of Development & Quality assurance



الجمهورية اليمنية  
وزارة التعليم العالي والبحث العلمي  
جامعة 21 سبتمبر للعلوم الطبية والتطبيقية  
كلية العلوم الطبية التطبيقية  
وحدة التطوير وضمان الجودة