

# UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

# **COURSE SYLLABUS**

# Emergency

2425-2-H4102D053-H4102D047M

### Aims

At the end of the course/activity block, the student will be able to:

- Learning the basics and mechanisms of physiopathology, diagnosis, monitoring and treatment of clinical emergencies, medical and surgical.
- · Apply BLSD and ACLS cardio-pulmonary resuscitation protocols

### Contents

Evaluation of the patient general conditions. (ABCDE evaluation)

Guidelines for the recovery and maintenance of the vital functions (BLSD and ACLS).

Acute cardiac failure and Introduction to cardiac support (Pharmacological and Mechanical)

Pre Hospital Trauma Life Support (Introduction and principles of treatments of traumatic Patients in Pre Hospital Setting)

Acute Respiratory Failures and Introduction to Respiratory Support

Shock (types, diagnosis and principles of treatment).

#### **Detailed program**

- Venous access in emergency.
- Vital signs recording in emergency.
- Cardiac defibrillation and pacing.
- CPR simulation.
- Evaluation and treatment of comatose patient.
- Evaluation of patients undergoing emergency surgery.
- Airways management.
- Acid base interpretation.
- Treatment of shock.
- Evaluation and treatment of poly trauma.

#### **Prerequisites**

Pre-clinical block (anatomy, biochemistry, physiology...) successfully passed

#### **Teaching form**

Teaching with 8 hours of frontal lessons

Interactive teaching:

- Pre Hospital Trauma Life Support (PHTLS): 8 hours with practical activity on mannequins and simulated scenarios in small groups
- Basic Life Support and Defibrillation (BLS-D): 16 hours with alternating lectures, practical exercises and simulated scenarios
  Pediatric Basic Life Support and Defibrillation (PBLS-D): 16 hours with alternating lectures, practical exercises and simulated scenarios

Observation form for Urgency and Emergency activities with tutoring by the anesthetist/resuscitator on emergency/urgency duty: 12 hours compulsory for all students.

- Methodology foreseen by the BLSD and ACLS courses
- Practical exercises with dummies or between students/teachers
- Discussion of clinical cases

#### **Textbook and teaching resource**

- Ashish R Panchal et Al. Part 3: Adult Basic and Advanced Life Support: 2020 American Heart Association Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care. Circulation . 2020 Oct 20;142(16\_suppl\_2):S366-S468
- 2021 International Consensus on Cardiopulmonary Resuscitation and Emergency Cardiovascular Care Science With Treatment Recommendations: Summary From the Basic Life Support; Advanced Life Support; Neonatal Life Support; Education, Implementation, and Teams; First Aid Task Forces; and the COVID-19 Working Group. Circulation. 2022 Mar;145(9):e645-e721.
- Tintinalli's Emergency Medicine Manual. <u>David M. Cline</u>, <u>Michael T. Fitch</u>, <u>O. John Ma</u>, <u>Rita K. Cydu</u>lka, <u>Scott A. Joing</u>, <u>Vincent J. Wang</u>. <u>McGraw-Hill</u>. ISBN:17-9780071837026
- Pollak A. et Al. PHTLS 10th Edition

#### Semester

second semester 2nd year

#### **Assessment method**

Ongoing tests:

- Practical tests/maneuvers
- Multiple choice tests

Final test:

- Multiple choice tests
- Practical tests/maneuvers

BLSD and ACLS

#### **Office hours**

on appiontment

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## Sustainable Development Goals

GOOD HEALTH AND WELL-BEING