



UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Intensive and Critical Care Nursing

2526-3-I0101D017

Aims

The integrated course aims to provide students with the knowledge and skills necessary to assist people in critical conditions in the main contexts of the critical area: first aid, intensive care, surgical block, intra- and extra-hospital emergency.

Objectives:

1. Knowledge and understanding: mastery of the theoretical and clinical knowledge necessary for critical patient management in different contexts.
2. Ability to apply knowledge and understanding: ability to plan, document and implement effective and safe nursing interventions based on clinical conditions and the operational environment.
3. Autonomy of judgement: ability to critically assess clinical situations, set priorities and make timely decisions.
4. Communicative skills: ability to collaborate in multi-professional teams and communicate clearly with patients and family members.
5. Learning ability: ability to self-update knowledge through consultation of guidelines, protocols and clinical cases.

Contents

Through the four disciplinary modules (Internal Medicine 4, General Surgery 3, Anesthesiology and Critical Area Nursing), the course allows you to:

- understand the pathophysiological basis of major acute and critical medical and surgical conditions;
- know the main anaesthesiological techniques and their impact on perioperative nursing management;
- acquire tools for assessment, monitoring and nursing intervention in the management of adult, neonatal and paediatric critical patient;
- develop communicative and decision-making skills to work in multidisciplinary teams, even in situations of high assistance intensity.

Detailed program

The course covers a wide range of topics relevant to critical area assistance, including:

- organization of the Emergency-Emergency Department (DEA), intra- and extra-hospital care routes, triage and protocols;
- Management of vital functions (respiratory, cardiovascular, neurological and regulatory) in acute conditions and clinical instability;
- invasive and non-invasive ventilation techniques, management of acute pain and delirium in intensive care, alterations of the hydro-electrolyte and metabolic balance;
- Anaesthesiological pharmacology, general and locoregional anesthesia techniques, intraoperative monitoring and the role of the nurse in the operating room;
- neurological and consciousness assessment, sedation, monitoring of intracranial pressure;
- taking care of the person with polytrauma outside the hospital;
- relational and communicative aspects with the person assisted and caregivers in situations of acute stress, communication of the bad news.

Complementary activities

The course provides for each student to participate in the course of BLS-D (Basic Life Support and Defibrillation), with acquisition of the official certificate of executor.

Prerequisites

By regulation

Teaching form

Lectures conducted in presence in dispensative mode, with exercises on clinical cases

Textbook and teaching resource

ESSENTIAL REFERENCE

Adult e pediatric

AARC Clinical Practice Guidelines: Artificial Airway Suctioning (2022). *Respiratory Care*. Vol 67 N. 2

Ausili D., Baccin G., Bezze S., Bompan A., Macchi B., Alberio M., Sironi C., Di Mauro S. (2018) *Il Modello assistenziale dei processi umani 2018: un quadro teorico per l'assistenza infermieristica di fronte alla sfida della complessità*. Stampa: www.lulu.com

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Clinical Practice Guidelines for the Prevention and Management of Pain, Agitation/Sedation, Delirium, Immobility, and Sleep Disruption in Adult Patients in the ICU (2018) *Critical Care Medicine*

Davis MD, Walsh BK, Sittig SE, Restrepo RD (2013) AARC clinical practice guideline: blood gas analysis and hemoximetry. *Respiratory Care* 58(10):1694-703

Guidelines for the provision of nutrition support therapy in the adult critically ill patient: The American Society for Parenteral and Enteral Nutrition (2022) *Journal of Parenteral and Enteral Nutrition*. 46(1):12-41

Infusion Therapy Standards of Practice – INS (2021) Blood Sampling via Direct Arterial Puncture 44: 128-129 *Journal of Infusion Nursing*

Kallet R.H. (2019), Ventilator Bundles in Transition: From Prevention of Ventilator-Associated Pneumonia to Prevention of Ventilator-Associated Events. *Respiratory Care*. Vol 64 N. 8

Klaus – Fanaroff's (2020) Cure del neonato ad alto rischio 7° ed. Antonio Delfino Editore
Linee di indirizzo nazionali sul triage intraospedaliero – atto intesa stato regioni – Ministero della Salute (2019)

Registered Nurses' Association of Ontario (2012). Promoting Safety: Alternative Approaches to the Use of Restraints. Toronto, ON, Canada: Author. Retrieved from <http://rnao.ca/bpg/guidelines/promoting-safety-alternative-approaches-use-restraints>

Società Italiana di Neonatologia (2015), Raccomandazioni per la rianimazione neonatale. BioMedia

Società Italiana di Neonatologia (2017), Percorsi assistenziali neonatologici. BioMedia

Sousa AS, Ferrito C, Paiva JA (2018), Intubation-associated pneumonia: An integrative review. 44: 45-52

Surviving Sepsis Campaign: Guidelines on the Management of Critically Ill Adults with Coronavirus Disease 2019 (COVID-19)

IN-DEPTH REFERENCE

Agency for healthcare research and quality (2012). Emergency Severity Index (ESI) A Triage Tool for Emergency Department Care

American Academy of Pediatrics and American heart Association (2016), Textbook of Neonatal Resuscitation. 7th edition. American Academy of Pediatrics

A.S.P.E.N. Clinical Guidelines: Nutrition Support of Adult Patients With Hyperglycemia (2013) *Journal of Parenteral and Enteral Nutrition*, Volume 37 Number 1:23-36

Australasian College of Emergency Medicine (2009), Emergency triage education kit

Australasian College for Emergency Medicine (2016), Guidelines on the implementation of the Australasian triage scale in emergency departments

Badon P, Cesaro S (2012). Manuale di nursing pediatrico. Casa Editrice Ambrosiana

Delibera Regione Toscana n° 806 del 24-07-2017

Gelinas C (2016) Pain assessment in the critical ill adult: Recent evidence and new trends. *Intensive and Critical Care Nursing*, 34: 1 – 11

Giacino JT, Katz DI, Schiff ND, Whyte J, Ashman EJ, Ashwal S, Barbano R, Hammond FM, Laureys S, Ling GSF, Nakase- Richardson R, Seel RT, Yablon S, Getchius TSD, Gronseth GS, Armstrong MJ, Gratton RJ, Bazaracai N, Cameron I, Watts N, Brayman C, Hancock G, Twohey R, AlShanteer S, Ryder JE, Wodrich K, Williams E, Guay A,

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Gruppo Formazione Triage (2019). Triage Infermieristico, IV edizione. Mc Graw Hill

Istituto Superiore di Sanità (2021), Rapporto ISS COVID-19 n 43/2020. Indicazioni ad interim per un appropriato sostegno della salute mentale nei minori di età durante la pandemia COVID 19. Gruppo di lavoro ISS Salute mentale ed emergenza COVID-19

Istituto Superiore di Sanità (2021), Rapporto ISS COVID-19 n 45/2020. Indicazioni ad interim per gravidanza, parto, allattamento e cura dei piccolissimi di 0-2 anni in risposta alla pandemia COVID 19.

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Karlsen K A (2012), The S.T.A.B.L.E. Program Learner Manual, 6th Edition. Post-resuscitation/Pre-transport Stabilization Care of Sick Infants: Guidelines for Neonatal Healthcare Providers. The S.T.A.B.L.E. Program

Lamond E, Murray S, Gibson CE (2017) Delirium screening in Intensive care: a life saving opportunity. *Intensive and Critical Care Nursing*, 44: 105-109

Linee d'indirizzo per il triage in pronto soccorso. Proposta del Coordinamento nazionale Triage di Pronto Soccorso – Monitor 29 ed. 2012 – AGENAS

Manuale formativo di triage pediatrico (2009). Biomedica

Ministero della salute (2010), Raccomandazioni per le cure perinatali nelle età gestazionali estremamente basse (22-25 settimane)

Ministero della salute (2010), Linee di indirizzo sull'organizzazione del sistema di trasporto materno assistito (STAM) e del sistema in emergenza del neonato (STEN)

Ministero della salute (2014), Il dolore nel bambino. Strumenti pratici di valutazione e terapia. Rodrigo editore srl.

Ministero della salute (2014), Raccomandazione per la prevenzione della morte o disabilità permanente in neonato sano di peso > 2500 grammi non correlata a malattia congenita.

Ministero della salute (2014), Linee di indirizzo nazionale per l'organizzazione e la gestione delle banche del latte umano donato nell'ambito della protezione, promozione e sostegno dell'allattamento al seno

Semester

3rd year 2nd semester

Assessment method

Written (for the modules of Internal Medicine 4, General Surgery 3 and Anesthesiology) (allocated time 40 minutes) and oral (for Nursing in Critical Area) see individual modules

Office hours

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Sustainable Development Goals

GOOD HEALTH AND WELL-BEING | QUALITY EDUCATION | GENDER EQUALITY
