HEALTH CENTER RESIDENCY - FINAL TRAINING (ML0269)

1. language

English.

2. course contents

Coordinator: Prof. ALFIERI SERGIO

Year Course: 2022/2023

Year Course: Sixth

Semester: Annual

CFU/UFC: 16

Moduli e docenti incaricati /Modules and lecturers:
- ANESTHESIOLOGY AND EMERGENCY MEDICINE II (ML0275) - 2 cfu - ssd MED/41
Prof. Marco Piastra, Massimo Antonelli, Paolo Maurizio Soave, Gennaro De Pascale
- ANESTHESIOLOGY AND EMERGENCY MEDICINE II PROFESSIONAL TRAIN (ML0271) - 2 cfu - ssd MED/41
Prof. Antonio Maria Dell'Anna, Anselmo Caricato, Paolo Maurizio Soave, Alessandro Vergari, Gennaro De Pascale, Gaetano Draisci
- GENERAL SURGERY PROFESSIONAL TRAINING (ML0272) - 2 cfu - ssd MED/18
Prof. Paola Caprino, Sergio Alfieri, Alberto Biondi, Andrea Di Giorgio, Laura Lorenzon, Antonio Pio Tortorelli, Laura Lorenzon, Paola Caprino, Gabriele Sganga
- GENERAL SURGERY VI (ML0274) - 4 cfu - ssd MED/18
Prof. Valerio Papa, Alberto Biondi, Laura Lorenzon, Giuseppe Quero, Vincenzo Tondolo, Sergio Alfieri, Claudio Fiorillo, Roberta Menghi, Fausto Rosa
- INTERNAL MEDICINE PROFESSIONAL TRAINING (ML0270) - 2 cfu - ssd MED/09
Prof. Luca Miele, Raimondo De Cristofaro, Graziano Onder, Donatella Brisinda, Massimo Montalto, Andrea Flex
- INTERNAL MEDICINE V (ML0273) - 4 cfu - ssd MED/09
Prof. Giovanni Gambassi, Maurizio Pompili, Raffaele Manna

3. bibliography

Internal Medicine – All of the documentation presented in classroom, including PPT, PDF, videos, movies, URL, websites etc. should be considered mandatory learning material and it will be made available to the students. The reference textbook for a more systematic learning is "*Medical Diagnosis and Treatment" – 55th edition Lange, 2016*. Although students are encouraged to consolidate and elaborate the learning from classroom material into more systematically treated textbook chapters, the acquisition of the textbook should only be considered optional.

General Surgery: All of the documentation presented in classroom, including PPT, PDF, videos, movies, URL, websites etc. should be considered mandatory learning material and it will be made available to the students. The reference textbooks for a more systematic learning are:

Sabiston *Textbook of surgery: the biological basis of modern surgical practice.* 20th edition

DP McKellar, RB Reiling, B Eiseman. *Prognosis and outcome in surgical disease* - Quality Medical Publishing, INC Saint Luis Missouri

Although students are encouraged to consolidate and elaborate the learning from classroom material into more systematically treated textbook chapters, the acquisition of the textbook should only be considered optional.

Anesthesiology Intensive Care and Emergency Medicine: All of the documentation presented in classroom, including PPT, PDF, videos, movies, URL, websites etc. should be considered mandatory learning material and it will be made available to the students. The reference textbooks for a more systematic learning are:

Goldfrank's Toxicologic Emergencies. Tenth Ed. Mc Graw Hill

Major Incident Medical Management and Support MIMMS: the practical approach at the scene. Third ed. Wiley-Blackwell

H MIMMS Major incident Medical Management and Support: The practical approach in the Hospital. Blackwell Ed

MRMI Medical response to Major Incidents and disasters: A practical Guide for All Medical Staff. Lennquist S. Springer Ed.

AHLS Advanced HAZMAT Life Support provider manual. 4th ed. The University of Arizona

R. Jason Yong, Michael Nguyen, et al. Pain Medicine: An Essential Review. 1st ed. 2017 Edition

Civetta, Taylor, & Kirby's Critical Care Medicine. A. Joseph Layon, Andrea Gabrielli, Mihae Yu, Kenneth E. eds. Wood Publication Date November 3, 2017

Although students are encouraged to consolidate and elaborate the learning from classroom material into more systematically treated textbook chapters, the acquisition of the textbook should only be considered optional.

4. learning objectives

Students are expected to attain competencies into:

Integrated clinical care and management in emergency, critical care, sub-intensive, acute, continuing and transitional care
Patient-centered and value-based clinical care. Professionalism and patient advocacy.

Modern surgical care: indications, decisions, timing, strategies, approaches, techniques, complications

Critical and Intensive Care Medicine: indications, decisions, techniques during life threatening and emergency conditions

Knowledge and understanding (Dublin 1) The students will learn how to connect the knowledge to the understanding of the most common clinical scenarios in the emergency, sub-intensive, acute, continuing, surgical and transitional care settings.

Applying knowledge and understanding (Dublin 2) The students will learn how to apply the knowledge to the understanding and applying them in the management of the most common clinical scenarios in the emergency, sub-intensive, acute, continuing, surgical and transitional care settings.

Making judgements (Dublin 3) The students will develop abilities on how to autonomously make judgments and take decisions when facing the integrated clinical care and management of patients in different clinical scenarios. More specifically, the students will learn how to develop a list of differential diagnoses. The students will then develop the ability to strategize the approach to get to a conclusive diagnosis or to the choice of different therapeutic strategies.

Communication skills (Dublin 4) The students will acquire the skills to illustrate critically clinical cases in the context of multidisciplinary teams. Furthermore, the students will become able to communicate care processes, clinical decisions as well as how to privilege

patient-centered and value-based clinical care. The students will also learn how to present and contextualize risks and benefits of the different, modern therapeutic approaches and surgical strategies.

Learning skills (Dublin 5) The students will develop and mature abilities about how to consolidate and extend the breadth and depth of knowledge and learn about continuing medical education and how to stay atop in the rapidly evolving field of biomedical science. To this end, the students will master the search and evaluation of evidence from textbooks, articles as well as by using online platforms, programs and web-based applications.

5. PREREQUISITES

As a general prerequisite, the students must have passed all the exams of the previous years.
The students are requested to have background knowledge of physiopathology and of common clinical signs and symptoms, and an understanding of the most prevalent medical and surgical diagnoses. It is a prerequisite to also being able to describe principal diagnostic techniques and therapeutic options.

6. teaching methods

Traditional classroom lectures, case-based learning, Interactive learning, E-learning and self-study.

Conoscenza e capacità di comprensione/Knowledge and understanding – During classroom teaching the students will be stimulated to recapitulate the formerly acquired individual knowledges to go above and beyond and translate them into a new level of integration.

Conoscenza e capacità di comprensione applicate/Applying knowledge and understanding – Either in class but even more specifically during the professional training, the students will be facilitated in the application of such level of integrative understanding to a complete and organic disentangling of uniquely complex and interconnected clinical scenarios.

Autonomia di giudizio/Making judgements – Either in class but even more specifically during the professional training, the students will be asked to proactively participate in the clinical decision making at every step in the diagnostic and therapeutic management of the most common clinical scenarios. The students will be encouraged to confront with real clinical cases and with patients directly when indicated.

Abilità comunicative/Communication skills – Students will be requested to play an active role during classroom teaching with questions and answers as well as in role-playing scenarios. During the professional training activities the students will be stimulated to present and discuss real clinical cases, to use the most appropriate scientific language and to nurture communication abilities in direct connections with patients.

Capacità di apprendere/Learning skills – Above and beyond the classroom teaching and the hands-on experience in the professional training, the students will be requested to take any opportunity for a more in-depth and systematic study of any of the relevant didactic content.

7. other informations

None.

8. methods for verifying learning and for evaluation

The exam will be based on a cumulative test with multiple-choice questions concerning all teaching modules. Questions might be introduced by a case scenario or a clinical vignette. The number of MCQ will be proportional to the number of CFU/hours of each teaching module during the course. Student's evaluation might also be assessed with Intermediate Tests.

MCQ will be introduced by a clinical scenario and can include a series of questions as the case evolves in subsequent steps mimicking clinical reality.

The number of MCQ will be proportional to the number of CFU/hours of each teaching module with a distribution by discipline based on total CFU (average 4-5 per each CFU).

At the end of MCQ an oral discussion could be required.

9. program

General Surgery

Abdominal pain
Surgical jaundice
Small bowel obstruction
Gastrointestinal bleeding
Inflamatory bowel diseases
Neuroendocrine tumours
Pancreatic cancer
Gastric cancer
Colo-Rectal cancer
Gastrointestinal Stromal Tumours
Soft Tissue Sarcomas
Hernias
Proctology

Internal Medicine

Syncope, dyspnea and leg edema
Recurrent chest pain
Newly developing heart failure
Chest pain and shortness of breath
Neck pain and swelling
Diplopia and proptosis of the left eye
Fever, chills, myalgias and rash
Fever, arthralgia and testicular pain
Leg swelling, abdominal distension and pain
Dyspnea, wheezing, headache, cough and night sweat
Olfactory hallucinations and paresthesias
Sore throat, fever myalgias, pericardial effusion
Fever, leukopenia, pulmonary infiltrates
Hypoesthesia and weakness in legs and arms
Altered mental status, bacteremia and acute liver failure
Pain and swelling of the calf and purpuric rash
Acute liver failure
Bloody diarrhea
NAFLD to HCC

Anesthesiology, Intensive Care and Pain Medicine*:*

Section 1: Disaster medicine and medical management of poisoned patients

Section 2: Medical response to major incidents and disasters:

- Triage
- Pre hospital response
- Hospital response

Section 3: Advanced hazmat support in chemical and radiological disasters:

Triage, prehospital response and hospital response during a major incident due to hazardous materials

Anesthesiology, Intensive Care and Pain Medicine:

- Section 4: Perioperative medicine:
  - Preoperative assessment and premedication
  - Anesthetic equipement and monitors, anesthesia management and principles of clinical pharmacology
  - Regional anesthesia for intraoperative and postoperative pain management
  - Postoperative monitoring and discharge from PACU (Postanesthesia Care Unit)
- Section 5: Pain Medicine
  - Evaluation of the patient with pain
  - Pharmacological interventions
  - Procedural interventions in operating room
  - Postoperative pain control
  - Labour and delivery analgesia

Anesthesiology, Intensive Care and Pain Medicine:

- Section 6: Acute Respiratory Failure:
  - Evaluation of the patient with respiratory insufficiency
  - ARDS
  - Principles of low and high flow oxygen therapy
  - Physiology and Management of Mechanical Ventilation
- Section 7: Circulatory Shock:
  - Assessment and management of the patient with septic shock
  - Assessment and management of the patients with cardiogenic shock