



MASTERS OF SCIENCE IN NURSING AND MIDWIFERY A.A. 2021/2022

Course: Nursing in Preventive Healthcare

Year: second

Period available (1°-2° semester – annual): 1st semester

University Credits: 4

Learning objectives

MED/45 General Nursing Sciences, General Clinics and Paediatrics

- Know the legislative framework for the role of nurses in prevention;
- Apply knowledge to the model case of a pathology;
- Know the main administrative data flows and how to use them for planning prevention interventions;
- Know the participation strategies that can be activated.

MED/36 Diagnostic imaging and radiotherapy

The course aims to provide:

- the basic principles of diagnostic imaging techniques;
- the main diagnostic imaging techniques used in secondary prevention;
- details of the secondary prevention paths activated in Italy, including potentialities and criticalities;
- a comparison at international level on the role of Diagnostic Imaging in prevention.

MED/44 Occupational Medicine

- Know the organisational aspects involved in the prevention of occupational and/or work-related diseases.
- Know how to identify risk factors in occupational settings and evaluate the possible impact on the general population and environment.
- Know the role and potential of the occupational health nurse in support of prevention policies in the workplace.
- Know the occupational consequences of Sars-Cov2 pandemic also in non-medical settings. Know and use the data collection tools regarding occupational and non-occupational risk factors in the workplace.
- Know the role of the nurse in the implementation of health promotion programmes in the workplace.

MED/42 General and applied hygiene

- Know the natural history of diseases and their prevention.



- Know about aetiological-environmental, pathogenetic-clinical and rehabilitative-social prevention interventions.
- Know how vaccines work, in particular SARS-CoV-2 vaccines.
- Understand the role of nurses.
- Understand how to administer vaccines safely and how to communicate effectively with patients within the framework of a vaccination campaign.
- Define and understand the determinants of health, their interaction and protection.
- Know the objectives and aims of health education.
- Know and adopt health promotion strategies.
- Understand the difference between communicable and non-communicable diseases and their impact on the patient and the community.
- Know the impact and prevention of care-related infections and apply prevention strategies to ICAs.
- Know the main tools and methods of risk assessment and accident reporting systems and know how to implement corrective actions to contain and prevent the risk of adverse events.
- Know the JCI methodology as a risk management tool to recognise and manage patient safety hazards.

Prerequisites

MED/45 General Nursing Sciences, General Clinics and Paediatrics

Basic knowledge of Nursing Sciences.

Basic knowledge of epidemiology and research.

MED/36 Diagnostic imaging and radiotherapy

No prerequisites required.

MED/44 Occupational Medicine

Basic Knowledge of Occupational Medicine and statistics.

MED/42 General and applied hygiene

No prerequisites required.

Content

MED/45 General Nursing Sciences, General Clinics and Paediatrics

- Primary, secondary and tertiary prevention: legislation and national and international framework of reference;
- The main models for taking care of patients in the community(Calgary, Chronic Care Model);
- Analysis of on-field experiences (COPD, Heart Failure);
- Strategies for user participation;
- The role of the nurse to support prevention policies in the community and in the services.

MED/36 Diagnostic imaging and radiotherapy

- Know the effect of ionising radiation on the body;
- Know the general principles of imaging techniques for diagnostic purposes using ionising radiation, ultrasound, magnetic fields and radiofrequencies;
- Know the indications and contraindications of diagnostic imaging examinations;
- Know the role of diagnostic imaging in prevention;
- Know the main possible secondary prevention pathways in Italy;
- Know the secondary prevention pathway for pleural cancer from asbestos exposure;
- Know the secondary prevention pathway for breast cancer;
- Know the secondary prevention pathway for colorectal carcinoma;
- Know the secondary prevention pathway for cardiovascular events ;
- Know the secondary prevention pathway for neurodegenerative diseases;
- Know the main secondary prevention pathways active in Europe, with an in-depth study of the similarities and differences with the Italian ones.

MED/44 Occupational Medicine

1. Prevention of occupational illnesses and health promotion interventions in the workplace, in a company in Northern Italy. Production cycle, risk factors, organisational models of prevention.
2. The "safe and healthy" workplace as a vehicle for communicating correct behaviour for the prevention of illnesses and the pursuit of the physical and mental well-being of workers and their families.
3. Quantification of occupational risks also through a critical reading of an Industrial Hygiene survey in relation to new technologies.
4. The role of occupational health nurses in support of prevention policies in the workplace.
5. Biological risk in the non-medical field, occupational consequences of the Sars-Cov2 pandemic in the company taken as a model (methods and measures to contain the risk of contagion in the workplace).
6. The role of the nurse in the collection of data to quantify occupational and non-occupational risk factors through the use of anamnestic questionnaires and the measurement of bio-anthropometric parameters.
7. Use of specific tools for data collection and processing: example of software for data collection in the occupational field.
8. Role of the nurse in the implementation of occupational health promotion programmes. Focus on work shifts, metabolic and cardiovascular risk, nutrition, sleep disorders.

MED/42 General and applied hygiene

- Prevention: meaning and classification; National Prevention Plan;
- Health Promotion and Health Education;
- The anti-COVID 19 vaccination. Analysis of on-field experiences;
- Organisational arrangements, responsibilities and how to safely administer vaccines;



- Healthcare-Associated Infections (ICA): focus on communicable diseases, definition, spread, impact and monitoring of ICA
- Hand hygiene, timing, modalities, opportunities and indications;
- Risk management process stages;
- Analysis of specific cases of adverse events, near misses and sentinel events;
- Application of the verification methodology Joint Commission Patient Tracer.

Teaching and learning activities and teaching methods

MED/45 General Nursing Sciences, General Clinics and Paediatrics

Analysis of on-field experiences through fact sheets and articles.

MED/36 Diagnostic imaging and radiotherapy

Lectures, guided discussions, class discussion.

MED/44 Occupational Medicine

The model of a company located in Northern Italy and dealing with cement production will be analysed. The technological production cycle will be described and the student will have to try to actively identify the possible occupational risk factors, the possible effects of the production activity on the environment, how to guarantee the environmental compatibility of a production activity. Teaching and learning activities: videos, group work, students' presentations, discussion with the teacher.

A prevention protocol adopted during the Sars-Cov2 pandemic will be illustrated, critically analysing its applicability, the possible communication problems and the role of the occupational health nurse. Teaching and learning activities: Group work and discussion in the classroom.

An example of a computer tool for the collection of anamnestic questionnaires in the workplace in the context of periodic health surveillance and health promotion programmes will be shown. Teaching and learning activities: use of questionnaires to be filled in by students.

Critical evaluation of the tool from the occupational nurse's point of view.

Presentation of a health promotion programme: eating behaviour and metabolic risk in 24 hour for shift workers. Critical analysis, possible role of the occupational health nurse.

MED/42 General and applied hygiene

Lectures and guided discussions. Analysis of experiences in the field through fact sheets and articles.

Assessment method

The exam will consist of:

- A written exam for MED/45 General Nursing Sciences, General Clinics and Paediatrics and MED/42 General Hygiene modules ;
- An oral exam for MED/44 Occupational Medicine and MED/36 Diagnostic imaging and radiotherapy modules



Suggested Readings

MED/45 General Nursing Sciences, General Clinics and Paediatrics

1. Materials will be provided during the lessons
2. Shaiani, Snell, Infermieristica di famiglia. Il Pensiero Scientifico Editore 2021

MED/36 Diagnostic imaging and radiotherapy

1. Materials will be provided during the lessons.

MED/44 Occupational Medicine

1. Materials will be provided during the lessons
2. Medicina del lavoro Manuale per le professioni sanitarie – Giuseppe De Lorenzo 2a Edizione EPC Editore.

MED/42 General and applied hygiene

1. Materials will be provided during the lessons
2. Igiene per le lauree delle professioni sanitarie – C. Meloni - Casa Editrice Ambrosiana
3. Igiene e sanità pubblica. Manuale per le professioni sanitarie – G. Maciocco, N. Comodo – Editore Carocci
4. Joint Commission International. Gli Standard Joint Commission International per Accredimento degli Ospedali, settima Edizione 2020.