



The Hebrew University of Jerusalem

Syllabus

NURSING PATIENTS WITH PROBLEMS IN OXYGENATION - 91420

Last update 31-12-2023

HU Credits: 5

Degree/Cycle: 1st degree (Bachelor)

Responsible Department: Nursing

Academic year: 0

Semester: 1st Semester

Teaching Languages: Hebrew

Campus: Ein Karem

Course/Module Coordinator: Ms. Rivka Herman

Mr. Ofir Rubinstin

Ms. Ronit Achrak

Coordinator Email: herman.rivka@mail.huji.ac.il

Coordinator Office Hours: Monday 15:00-16:00 by email

Teaching Staff:

Ms. Karina Bar,
Ms. Hodaya Gabay,
Ms. Miriam Margolin,
Mr. Ahmad Namarni,
Ms. Herman Rivka,
Ms. ARIELA KATAYEV,
Ms. Moran Zerahia,
Ms. Chen Krispin,
Ms. anna rogov,
Ms. Julia Deychev,
Mr. ,
Ms. MICHAL ANGEL,
Mr. ,
Ms. Lihi snir berkovitz

Course/Module description:

The course will include two study units in aspects related to the patient suffering from an acute and chronic disease related to pathological conditions in the respiratory system and the cardiovascular system. The course will emphasize the use of the nursing process at different levels of prevention.

Part One: Breathing

- Repetition of the basic concepts of the respiratory system
- Assessment and diagnostic tests of the respiratory system
- Acid-base balance and interpretation of blood gas tests
- Management of nursing care - the patient with acute and chronic respiratory diseases
- Clinical and therapeutic aspects in the ventilated patient
- Managing the treatment of a patient with acute respiratory failure ARDS

Part two: Cardiovascular and shock states

- Repetition of basic concepts of the cardiovascular system
- Assessment and diagnostic tests of the cardiovascular system.
- Nursing the patient suffering from a mobility disorder due to vascular diseases
- Studying the ECG chart and identifying heart rhythm and conduction disorders
- Nursing the patient suffering from acute and chronic heart diseases
- Management of treatment in shock situations

Course/Module aims:

To impart knowledge and develop critical thinking for planning comprehensive nursing care for patients and their families suffering from the aforementioned

disorders.

Learning outcomes - On successful completion of this module, students should be able to:

At the end of the course the student will be able to:

1. Make estimates relevant to the clinical condition of the patient suffering from problems in the respiratory, cardiovascular and cardiovascular systems.
2. Identify signs and symptoms in the patient for pathological conditions studied in the course.
3. Formulate nursing diagnoses in a patient suffering from disorders in the respiratory, cardiovascular and cardiovascular systems.
4. To plan a nursing intervention at all levels of prevention, while involving the patient and his family members in making decisions
5. Demonstrate the application of professional behavior in all stages of the nursing process, with an emphasis on critical thinking, Caring and management of care for the patient suffering from the above problems.

Attendance requirements(%):

Mandatory attendance at lectures, and online Zoom lectures in accordance with the regulations, section "theoretical studies":

Student participation in classes, exercises, seminars, teaching in the laboratory, etc. is mandatory. Failure to participate regularly in these studies, including due to overlapping courses, may deprive the student of his right to receive a final grade in the course. (See section 6.2 of the Hebrew University regulations).

A student who is absent from the course, even for justified reasons such as reserve, illness, bereavement, birth, holiday, is his/her responsibility to complete the missing material

Teaching arrangement and method of instruction: Face-to-face teaching, remote teaching is also possible (Zoom class - advance notice will be given) asynchronous teaching that combines access to the information sources via Moodle and recorded lectures

Course/Module Content:

מערכת הנשימה

Respiratory system-

אומדן המטופל עם הפרעות במערכת הנשימה

Respiratory assessment-

סימנים וסימפטומים מייצגים - *representing s'symptom and Sings*
בדיקה גופנית *examination Clinical*
בדיקות אבחון נוספות *tests dedicated*

מצבים אקוטיים במערכת נשימה: *conditions Respiratory Acute*

Pneumonia:
Community-Acquired Pneumonia
Hospital- Acquired Pneumonia
Pneumonia in the Immunocompromised Host
Aspiration Pneumonia

Pulmonary Tuberculosis

Acute Respiratory Failure

Acid-Base Disturbances:
Acute and Chronic Metabolic Acidosis
Acute and Chronic Metabolic Alkalosis
Acute and Chronic Respiratory Acidosis
Acute and Chronic Respiratory Alkalosis
Mixed Acid-Base Disorders

מצבים כרוניים במערכת נשימה: *conditions Chronic*

Asthma
COPD (Chronic Obstructive Pulmonary Disease):
Chronic Bronchitis
Emphysema
Bronchiectasis

עקרונות הנשמה מלאכותית וטיפול במטופל מונשם - *respiratory and principles lines guide*
care for mechanical ventilated patients

Tracheostomy
Mechanical Ventilation:
Negative Pressure Ventilation
Positive Pressure Ventilation

מערכת לב וכלי הדם - *system Cardiovascular*
אומדן המטופל עם הפרעות במערכת לב וכלי דם - *Assessment Cardiovascular*
סימנים וסימפטומים מייצגים - *representing s'symptom and Sings*

examination Physical - בדיקה גופנית
tests dedicated - בדיקות אבחון נוספות

system Cardiovascular conditions Pathologic: מצבים פתולוגיים במערכת לב וכלי הדם:

Dysrhythmias:

Sinus Bradycardia

Sinus Tachycardia

Sinus Arrhythmia

Premature Atrial Complex

Atrial Flutter

Atrial Fibrillation

Premature Ventricular Complex

Supra-ventricular Tachycardia

Ventricular Tachycardia

Ventricular Fibrillation

Ventricular Asystola

Conduction abnormalities:

First-degree Atrioventricular Block

Second-degree Atrioventricular Block (Type I, Type II)

Third-degree Atrioventricular Block (Complete)

Coronary Atherosclerosis

Hypertension

Angina Pectoris:

Stable Angina Pectoris

Acute Coronary Syndrome:

Unstable Angina Pectoris

Myocardial Infarction

Valvular Disorders:

Mitral Valve Prolapse

Mitral Regurgitation

Mitral Stenosis

Aortic Regurgitation

Aortic Stenosis

Infectious Disease of the Heart:

Endocarditis

Myocarditis

Pericarditis

Acute and Chronic Heart Failure

Pulmonary edema

Vascular disorders and problems of peripheral circulation:

Peripheral Arterial Occlusive Disease
Thromboangiitis Obliterans (Buerger's Disease)
Aortoiliac Disease
Aneurysms
Arterial Embolism and Arterial Thrombosis
Raynaud's Phenomenon
Venous Thromboembolism
Chronic Venous Insufficiency
Leg Ulcers
Varicose Veins
Lymphatic Disorders

Shock:
Hypovolemic shock
Cardiogenic shock
Septic shock
Neurogenic shock
Anaphylactic shock

Required Reading:

Ignatavicius, D.D., Workman, M.L., Rebar, C.R., & Heimgartner, N.M (2018). Medical-Surgical Nursing: Concepts for interprofessional collaborative care (10th ed.), St. Louis, MI; Elsevier

Additional Reading Material:

American Heart Association Guidelines Update for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care.(2019). Part 5: Adult Basic Life Support and Cardiopulmonary Resuscitation Quality
American Heart Association and American Red Cross Guidelines Update for First Aid. (2019). Part 15: First Aid. Circulation

Hinkle J. L. & Cheever K.H. (2021). Brunner & Suddarth's Textbook of Medical-Surgical Nursing (15th ed.) Philadelphia, PA; Lippincott, Williams & Wilkins

Grading Scheme:

Written / Oral / Practical Exam 100 %

Additional information:

Summarizing the first part breathing - 30% of the grade

Arrhythmia examiner - 10% of the grade

Final exam: includes the second part - cardiovascular and shock states 60% of the grade