

Dydaktyka

Sylabus – rehabilitacja

“Rehabilitation” – syllabus – 2012/2013

1. Subject: **Rehabilitation**
2. 5th academic year; 9th and 10th semester in the course of study
3. Coordinator: **prof. dr hab. Zdzisława Wrzosek**
4. Timetable
 - a. Classes: autumn semester: 8 hours / spring semester: 16 hours
 - b. Seminars: autumn semester: 6 hours
5. Credit's condition:
 - a. attendance in classes
6. Lecturers:
 - a. prof. dr hab. Zdzisława Wrzosek – kierownik Zakładu Rehabilitacji WLKP AM
 - b. dr n. med. Edyta Sutkowska – adiunkt Zakładu Rehabilitacji WLKP AM
 - c. dr n. k.f. Iwona Demczyszak – adiunkt Zakładu Fizjoterapii WLKP AM
 - d. dr Piotr Koprowski – starszy wykładowca Kliniki Ortopedii i Traumatologii Narządu Ruchu
 - e. lek. med. Michał Sokołowski - wykładowca Zakładu Rehabilitacji WLKP AM
7. Syllabus:
 - a. Rehabilitation in orthopedic and traumatology
 - b. Rehabilitation in rheumatology
 - c. Neurologic rehabilitation
 - d. Rehabilitation in internal medicine
 - e. Physical therapy

Rudiments of physiology of physiotherapy

- f. Functional assessment of movement apparatus, cardiovascular system, respiratory system and nervous system.
- g. Principles of formulating the rehabilitation program
- h. Orthopaedic devices
- i. Disability assessment.

8. Classes

a. Rehabilitation in orthopedic surgery and traumatology

- i. Functional assessment of movement apparatus
- ii. Principles of formulating the rehabilitation program
- iii. Basic Science on Injury and Repair of Skeletal Muscle, Ligaments and Tendons
- iv. Physical Forces Used in Musculoskeletal Rehabilitation
- v. Common Physical Therapy Techniques
- vi. Gait Analysis
- vii. Orthopaedic devices
- viii. Rehabilitation After Total Joint Replacement
- ix. Prevention of bed rest complications
- x. Principles of Sports Rehabilitation

b. Rehabilitation in respiratory tract diseases

- i. Definition and concept of pulmonary rehabilitation
- ii. Physical Examination
- iii. Conditions with predominant oxygenation impairment
- iv. Conditions with predominant ventilatory impairment
- v. Formulating pulmonary rehabilitation program
 - 1. medical evaluation and management,
 - 2. initial assessment and goal setting,

3. therapeutic modalities of exercise training,
 4. psychosocial counseling,
 5. nutritional counseling,
 6. daily living training and energy management,
 7. education,
 8. evaluation of outcomes,
 9. maintenance program
- vi. the integrative cardiorespiratory exercise test
 - vii. exercise training
 - viii. Breathing retraining
 - ix. improving performance of daily activities
 - x. education

c. Rehabilitation in neurology

i. Definition and concept of neurologic rehabilitation

ii. Physical Examination

1. Head and cranial nerves
2. Stance and gait
3. Most common abnormalities of the intrinsic muscle reflexes

iii. Examination in rehabilitation

1. Voluntary motor function
2. Complete muscle test
3. Orthoses and medical problems with prevention substitution and stabilisation
4. Sensation
5. Test proprioception
6. Test pain

7. Muscle tone (Asworth scale)
 8. ROM
 9. Functional capabilities (Functional Assessment Terminology of Zimmermann)
- iv. Movement disorders
 - v. Upper motor neuron disorders
 - vi. Rehabilitation of spasticity
 - vii. Spinal cord lesions disorders
 - viii. Lower motor neuron disturbances
 - ix. Brain plasticity
 - x. Terminology for Postinjury Gains

d. Physical therapy

- i. Rudiments of physiology of physiotherapy
- ii. Legal Concerns
- iii. Thermal Modalities
 1. Transmission of Thermal Energy
 2. Cryotherapy
 3. Thermotherapy
 - a. Shortwave Diathermy
 - b. Microwave Diathermy
- iv. Ultrasound
 1. Phonophoresis
- v. Electrotherapy
 1. Iontophoresis
 2. Interferential Currents
 3. Low Intensity Stimulators

4. High-Voltage Pulsed Stimulation
5. Transcutaneous Electric Nerve Stimulation /TENS/
6. Neuromuscular Stimulation
7. Point Stimulation
- vi. Low Level Laser Therapy
- vii. Magnet Therapy
- viii. Extracorporeal Shock Wave Therapy (ESWT)
- ix. Safety in Using Therapeutic Modalities