Information sheet for the course Balneotherapy,climatotherapy, hydrotherapy and thermotherapy

University: Alexander Dubček University in Trenčín

Faculty: Faculty of Health Care

Course unit code: *BKHT/e*

Course unit title: Balneotherapy, climatotherapy, hydrotherapy and thermotherapy

Planned types, learning activities and teaching methods:

Lecture: 2 hour weekly/26 hours per semester of study; full-time

Number of credits: 2

Recommended semester / **trimester:** 4th semester in the 2nd year (part-time)

Degree of study: *I*

Course prerequisites: *Electrotherapy*

Assessment methods:

Student receives 50 points for the semester:

- Active participation in lectures.
- Test (50 points).

To get an A mark, the student needs to obtain at least 48 points, for B at least 44 points, for C at least 41 points, for D at least 38 points and for E at least 35 points.

Learning outcomes:

By studying the subject of balneotherapy, climatotherapy, hydrotherapy and thermotherapy the student gains theoretical knowledge in the field of physical therapy and its application in balneology focusing on hydrotherapy, thermotherapy, hydrokinesiotherapy and climatic treatment. He / she also learns the specifics of balneology using the healing mineral waters, CO₂ and peloids. He / she obtains knowledge of the spa treatment organization, its indications and contraindications and specificities of the spas in relation to the particular groups of diseases. He / she is able to apply the knowledge in practice.

Course contents:

Lectures:

- 1. Thermotherapy: physical nature and physiological aspects of thermotherapy, division of thermotherapy, thermoregulation, the effect of thermal stimuli on organs and systems, the main principles of thermotherapy.
- 2. Negative thermotherapy:
 - general cryotherapy: effects, application principles, (dosage and intensity) and the application technique, indications and contraindications, safety and hygiene measures and psychological and ethical aspects of the approach during the therapy,
 - local cryotherapy: effects, application principles, (dosage and intensity) and the application technique, indications and contraindications, safety and hygiene measures, psychological and ethical aspects of the approach during the therapy.
- 3. Positive thermotherapy:
 - total hyperthermia: full body water bath, full body peloid bath, full body peloid wrap, Turkish bath, sauna (effects, application principles, application techniques and instrumentation), indications and contraindications, safety and hygiene measures, psychological and ethical aspects of the approach during the therapy,
 - local thermotherapy: paraffin wraps and packs, partial peloid baths, peloid wraps and packs, para-peloid wraps and packs, Hauffe limb bath (effects, application

principles, application techniques and instrumentation, indications and contraindications, safety and hygiene measures, psychological and ethical aspects of the approach during the therapy.

- 4. Hydrotherapy:
 - essence, mechanical effect of water, effects of special chemicals and thermal effects.
 - Kneipp hydrotherapy: effects, application principles, application techniques, indications and contraindications, safety and hygiene measures, psychological and ethical aspects of the approach during the therapy.
 - hydrotherapy treatments with massage effect: underwater massage, whirlpool bath, Scottish showers (effects, application principles, application techniques and instrumentation, indications and contraindications),
 - hydrokinesiotherapy: effects, application principles, application techniques and methodology, safety and hygiene measures, psychological and ethical aspects of the approach during the therapy,
 - bath with ingredients: bath types according to chemical composition of the ingredients, effects of different types of baths with ingredients, application principles, application techniques and instrumentation, indications and contraindications, safety and hygiene measures, psychological and ethical aspects of the approach during the therapy.

5. Balneotherapy:

- *characteristics, objectives, tasks and allocation of natural medicinal resources, their characteristics, health effects and therapeutic use,*
- healing waters: characteristics, classification (by overall mineralization, soluble gas content, major ionic components, biologically and pharmacologically important components, radioactivity, actual response, natural temperature and osmotic pressure), practical classification for the purposes of balneotherapy,
- therapy with healing waters: external balneotherapy, drinking therapy and inhalations, effects, application principles and application techniques, indications and contraindications, safety and hygiene measures,
- peloids: characteristics, classification, properties, health effects, medical use,
- *excursion in the spa.*
- 6. Bioclimatotherapy:
 - characteristics, objectives, tasks, impact of climate change on human body (meteorological factors), mechanism of effects of meteorological factors, therapeutic use of climate change, climate zones, classification from vertical point of view, acclimatization, climatotherapy indications,
 - *heliotherapy (sunlight treatment), thalassotherapy (sea climate and sea bath therapy), speleotherapy (therapy taking place in caves), meteorosensitivity.*
- 7. Organization of spa care in the Slovak Republic, list of indications, general contraindications.
- 8. Gas injections: effects, application principles and application techniques, indications and contraindications, safety and hygiene measures.
- 9. Oxygen therapy and ozone therapy: effects, application principles and application techniques, indications and contraindications, safety and hygiene measures.

Recommended reading:

- 1. KOLÁŘ, P. a kol.: 2010. Rehabilitacepro klinickou praxi. Galén, 2010, ISBN 978-80-7262-6571.
- 2. KOMAČEKOVÁ, D.: 2006. Fyzikálna terapia. Osveta Martin, ISBN 80-80632-308
- 3. ČELKO, J., ZÁLEŠÁKOVÁ, J., GÚTH, A.: 1997. Hydrokinezioterapia, LiečrehGúth, 1997, ISBN 80-967383-6-4.
- 4. ZVONÁR, J. a kol.: 2004. Termoterapia, hydroterapia, balneoterapia a klimatoterapia.

Osveta, 2004, ISBN 80-8063-175-1.

- 5. ŠPIŠÁK, L., RUŠAVÝ, Z. a kol.: 2010. Klinická balneologie. NakladatelstvíKarolinum, 2010, ISBN 978-80-246-1654-4.
- 6. ŠKAPÍK, M. a kol.: 1994. Využití balneoterapie vevnitřnímlékařství. Grada, 1994, ISBN 80-7169-130-5.
- 7. JANDOVÁ, D.: 2008. Balneologie. Grada, 2008, ISBN 978-80-2472-8209.
- 8. ČELKO, J.: 1995. Súčasné názory na využívanie tepla v liečebnej praxi. In: Rehabilitácia 28, 1995, 2 s 73 78.
- 9. GÚTH, A. a kol.: 2005. Liečebné metodiky v rehabilitácii pre fyzioterapeutov. LiečrehGúth, ISBN 80-88932-16-5.

Language: Slovak

Remarks:

Evaluation history

Total number of evaluated students:

А	В	С	D	Е	FX

Lecturers:

doc. MUDr. Juraj Čelko, PhD.,

PhDr., MUDr. Miroslav Malay

Last modification: 22.04.2014

Supervisor: doc. MUDr. Juraj Čelko, PhD.