

MINISTRY OF HEALTH OF UKRAINE
KHARKIV NATIONAL MEDICAL UNIVERSITY

DEPARTMENT OF NEUROLOGY

Academic year 2021-2022

SYLLABUS OF TRAINING COURSE IN

«BASICS OF REFLEXOLOGY»

Elective course

Form of education _____ full-time _____

Field of knowledge 22 «Health» _____

Specialty 222 «Medicine» _____

Second (Master's) level

Year V

The syllabus of the training course was approved
at the meeting of the department of neurology

Protocol from
«01» September 2021 № 1

Acting head of the department
[Signature] prof. Tovazhnyanska O.L.

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Approved by the methodical commission of KhNMU
on problems of professional training

Protocol from
“ ” _____ 20 _____ № _____

Head [Signature] prof. Kravchun P.G.

“ ” _____ 20 _____

Syllabus of the training course in "Basics of Reflexology" for students in the field of knowledge 22 "Health" in the specialty 222 "Medicine" second (Master's) level

Year 5

Developers: Acting head of the Department of Neurology, MD, Professor O.L. Tovazhnyanska;
Associate Professor, Ph.D. O.I. Kauk.

INFORMATION ABOUT LECTURERS

1. Kauk Oksana Ivanivna - Associate Professor of Neurology dpt, PhD (medicine). Professional interests: pediatric neurology, paroxysmal conditions in children, mental retardation and correction of behavioral disorders in children. Cont. phone: +380995619123, e-mail address for correspondence oi.kauk@knmu.edu.ua (domestic and Russian-speaking foreign students);
2. Markovska Olena Volodymyrivna - Associate Professor of Neurology Department, PhD (medicine). Professional interests: cerebrovascular diseases, demyelinating diseases. Cont. phone: +380954207904, e-mail address for correspondence ov.markovska@knmu.edu.ua (domestic and Russian-speaking foreign students);
3. Solovyova Evgeniya Tarasivna - Assistant of the Department of Neurology, Candidate of Medical Sciences. Professional interests: cerebrovascular diseases, diseases of the peripheral nervous system. Cont. phone: +380679999450, e-mail address for correspondence yt.soloviova@knmu.edu.ua (English-speaking students);
4. Reminyak Yuliya Kostiantynivna - Assistant of the Department of Neurology. Professional interests: migraine and other types of headache. Cont. phone: +380995655432, e-mail for correspondence yk.remyniak@knmu.edu.ua (English-speaking students).

Information about counseling

The students are consulted face-to-face by teachers of groups according to the schedule approved by the department which can be found on the information stand of the department, on the eve of tests and exams.

Location

Venue of practical classes: training room of the Department of Neurology on the basis of SPMC "UC" KhNMU (Kharkiv, O. Speyer St., 4) and KNP CHO "OKL" (Kharkiv, 13 Nezalezhnosti Ave.).

Class time: according to the schedule.

INTRODUCTION

The syllabus of the discipline «Basics of Reflexology» is compiled in accordance with the educational-professional program (hereinafter - EPP) «Medicine» та and the Standard of Higher Education of Ukraine (hereinafter - the Standard), the second (master's) level, field of knowledge 22 "Health", specialty "Medicine".

Description of the course

Reflexology is an effective method of treatment that increases the functional capabilities of the body and is effectively used in the dysfunction of individual systems and organs. In addition to the absence of side effects, reflexology is characterized by relatively high efficiency in certain pathological conditions, as well as availability and cost-effectiveness. Some methods of reflexology do not require the cost of implementation in practice.

General structure of the course - the program of the course is structured in separate sections: "General reflexology" and "Special reflexology".

"General reflexology" section includes the following topics:

- Modern interpretation of reflexology.
- The doctrine of points and meridians.
- Indications and contraindications for reflexology.
- Methods of reflexology.
- Specifics of application at children.
- Microacupuncture systems.

The section "Special reflexology" includes:

- Acupuncture and cauterization.
- The main components of puncture reflexology: reception and moment of action.
- Microwave therapy, laser therapy.
- Sudzhok therapy.
- Acupuncture analgesia.
- The use of acupressure in neurology.

The role and place of the course in the educational system

The course "Basics of Reflexology" is an integral part of the training of future dentists, giving opportunities for senior students not only to master the basic theoretical aspects of reflexology, but also to acquire practical skills in its use in complex treatment at various stages of the pathological process and rehabilitation of patients.

Discipline page in the Moodle system -<http://31.128.79.157:8083/course/view.php?id=1517>

Prerequisites and co-requisites of the course

"Basics of Reflexology" as a course is based on the study of medical biology, histology, physiology and pathological physiology, human anatomy and pathomorphology, integrating with

these courses, propaedeutic courses of therapeutic profile, pharmacology, radiology, integrating with them.

The course "Basics of Reflexology" is fruitfully integrated with other clinical courses (internal medicine, obstetrics and gynecology, surgery, orthopedics, physical rehabilitation, etc.).

The purpose and objectives of the course

1.1. The purpose of teaching the course "Reflexology in Dentistry" is to create in students a holistic view of the basic theoretical and methodological aspects of reflexology as well as the acquisition of practical skills in its use in clinical conditions.

1.2. Tasks: mastering simple methods of reflexology (acupressure and segmental massage, thermoreflexology, postisometric muscle relaxation, etc.).

1.3. Competences and learning outcomes

1.3.1. The study of the discipline provides students with mastery of competencies	
Integral competence	ability to solve typical and complex specialized tasks and practical problems in professional activities in the field of health care, or in the learning process, which involves research and / or innovation and is characterized by complexity and uncertainty of conditions and requirements.
General Competences (GC)	GC1 - Ability to abstract thinking, analysis and synthesis, ability to learn and be modernly trained GC2 - Ability to apply knowledge in practical situations GC3 - Knowledge and understanding of the subject area and understanding of the professional activity GC4 - Ability to adapt and act in a new situation GC5 - Ability to make an informed decision; work in a team; interpersonal skills GC6 - Ability to communicate in the state language both orally and in writing; ability to communicate in a foreign language GC7 - Skills in the use of information and communication technologies GC8 - Definiteness and persistence in relation to the tasks set and taken responsibilities GC9 - Ability to act socially responsibly and consciously
Professional competencies (PC)	PC1 - Survey skills PC2 - Ability to determine the required list of laboratory and instrumental research and evaluation of their results PC3 - Ability to establish a preliminary and clinical diagnosis disease PC4 - Ability to determine the required mode of work and rest, the nature of nutrition in the treatment of diseases PC5 - Ability to determine the principles and nature of treatment diseases PC6 - Ability to diagnose emergencies PC7 - Ability to determine tactics and skills to provide emergency medical care PC9 - Skills to perform medical manipulations

1.3.2. The study of the discipline ensures the acquisition of students the following program learning outcomes:

Knowledge and understanding:

PLO 1 - acquisition by a person of general and special fundamental and professionally-oriented knowledge, skills, abilities, competencies necessary for the performance of typical professional tasks related to his / her activity in the medical field in the relevant position

PLO 2 - knowledge of psychophysiological features of the person, human health, support of health, prevention of diseases, treatment of the person, health of the population

Application of knowledge and understanding:

PLO 3 - the ability to apply the acquired knowledge, skills and understanding to solve typical problems of the doctor, the scope of which is provided by lists of syndromes and symptoms, diseases, emergencies, laboratory and instrumental research, medical manipulations

PLO 4 - collection of patient information

PLO 5 - evaluation of survey results, physical examination, laboratory and instrumental research data

PLO 6 - establishing a preliminary clinical diagnosis of the disease

PLO 7 - determining the nature, principles of treatment of diseases

PLO 9 - determination of tactics of contingent contingent of persons subject to dispensary supervision

PLO 10 - diagnosing emergencies, determining the tactics of emergency medical care

PLO 15 - performance of medical manipulations

PLO 17 - maintenance of medical documentation, processing of state, social and medical information

Formation of judgements:

PLO 18 - the ability to assess the state of human health and provide its support taking into account the impact of the environment and other health factors

PLO 20 - the ability to apply the acquired knowledge about the existing health care system to optimize their own professional activities and participate in solving practical problems of the industry

PLO 21 - the formation of a specialist with appropriate personal qualities, who adheres to the code of ethics of the doctor

1.3.3. The study of the discipline ensures the acquisition of students following social skills (Soft skills):

- communication skills
- interpersonal skills
- research skills
- adaptability
- emotional intelligence

2. INFORMATION SCOPE OF THE COURSE

Name of indicators	Field of knowledge, direction of training, educational and qualification level	Characteristics of the discipline
		full-time education
Number of credits - 3,0	educational program for training specialists of the second (master's) level of higher education training 22 "Health"	Elective
Total number of hours - 90	Specialty: 222 "Medicine"	Year of preparation:
		5th
		Semester
		Lectures
		0 hours
		Practical, seminar
		20 hours
Hours for full-time (or evening) form of education: classroom – 20 individual work of the student - 70	Education level: master	Laboratory
		0 hours
		Individual work
		70 hours
		Individual tasks:
		Type of control:
		test

2.1 Description of the discipline

Topics of practical classes

№	Name topics	Number of hours	Teaching methods	Forms of control
Lesson 1	Modern interpretation of reflexology. The doctrine of points and meridians. Indications and contraindications for reflexology. Methods of reflexology.	5	Story-appearance, conversation, demonstration, presentation, supervision of patients, written creative works, creative tasks; individual tasks	Oral interview; written survey; test control;
Lesson 2	Reflex diagnostics. Microacupuncture systems.	5		
Lesson 3	Acupuncture and cauterization. Microwave therapy, laser therapy, sujok therapy. Acupuncture analgesia.	5		
Lesson 4	The use of acupressure in dentistry. Practical experience. Credit lesson.	5		
	TOTAL	20		

Individual work

№ з/п	Name topics	Number of hours	Teaching methods	Forms of control
1	Ways to find acupuncture points. The use of meridian system and individually proportional segments.	4	Written creative works, creative tasks; individual tasks.	Oral interview; written survey; test control, abstracts; report.
2	Viscero-sensory phenomenon (Zakhar'ina-Geda zone).	2		
3	General principles of acupuncture diagnostics: survey, examination, palpation, auscultation, apparatus measurements.	4		
4	Electropuncture diagnostics (standard vegetative test).	4		
5	Microacupuncture systems (MAC) and their properties. Auricular MAS, systematics of its acupuncture zones.	4		
6	Manual therapy and its scope, types of biomechanical disorders..	4		
7	Features of manual diagnostics, the concept of anatomical and functional barriers..	4		
8	Myofascial pain syndrome. Manual techniques of muscle correction.	4		
9	Acupressure techniques. Simple finger pressing. Acupuncture points, which are most often used in acupressure.	4		
10	Local barotherapy, its therapeutic effects and methods of application..	4		
11	Superficial multi-needle acupuncture (PBA) and its types, mechanisms of therapeutic action, indications and contraindications.	4		
12	Methods of heat puncture. General indications for its use. Local cryotherapy.	4		
13	The mechanism of analgesic action of percutaneous electroneurostimulation (PENS): the scheme of gate control of pain, classification of nerve fibers. Methods of conducting PENS.	4		
14	Electromyostimulation, its therapeutic effects and application methods.	4		
15	Laser therapy and laser acupuncture: mechanisms of therapeutic action, methods, indications for use.	4		
16	Postisometric muscle relaxation, its application at different stages of manual treatment.	4		
17	Reflexology in complex measures for pain syndromes.	4		
18	Practical experience. Credit lesson.	4		
Total hours of individual student work		70		

3. Evaluation policy

3.1. Evaluation of the success of education of students is carried out on the basis of the current "Instructions for evaluating the educational activities of students of KhNMU"

Organization of current control.

Current educational activity of students (CEA) is controlled in practical classes according to specific goals and during the individual work of the teacher with students.

The following tools are used to diagnose the level of students' preparation: control of practical skills, tests, solving situational problems and tasks "Krok -2".

Final control is upon completion of the course.

Assessment of student performance in the subject is a rating and is set on a multi-point scale **as the arithmetic mean of the relevant sections, determined by the ECTS system and the traditional scale adopted in Ukraine.**

If a student wants to improve his rating, he has the opportunity to perform individual tasks, which include preparation of diagrams of meridians and acupuncture points, creating tables of compatibility of acupuncture points in different diseases, schemes of complex application of different reflexology methods in different nosological forms of disease, creating test tasks for control survey, preparation of reports for scientific conferences, participation in interuniversity competitions in the course, etc.

Individual student tasks are assessed if all the teacher's tasks have been performed (reports at scientific and practical conferences of the department, university, writing abstracts, articles, participation in the All-Ukrainian Olympiad). Points (not more than 10) are added as incentives. The total number of points for the current educational activity may not exceed 200 points.

Assessment of students' independent work. Independent work of students, which is provided by the topic of the lesson along with the classroom work, is assessed during the current control of the topic in the relevant lesson.

Elimination of academic debt. Missed practical classes (both classroom and distance) are subject to mandatory completion. Practice is carried out either by the teacher of the group or by the teacher on duty, the remote form of practice is allowed (by prior arrangement). Missed classes for up to 1 month from the moment of admission are worked out free of charge, if the term exceeds 1 month - on request, with the permission of the dean's office, which decides the form of practice (free or paid).

Overall grade in the discipline.

The final score for the common learning activity (CLA) and the final lessons (FL) is defined as the arithmetic mean of the traditional grades for each lesson and software, rounded to 2 decimal places and converted into a multi-point scale according to Table 2 according to the "Instructions for assessment activities under the European credit transfer system for the organization of the educational process in KhNMU "from 21.08.2021 №181.

To enroll in the discipline, the student must receive from 120 to 200 points, which is expressed on a two-point scale: "passed" or "not passed".

The students who have not been admitted to the credit test or have not passed it, are entitled to liquidation of current academic debt and reassignment of the semester control within the current semester, as well as during winter or summer vacations after the

end of the semester but before the next.

The students can re-take the differential test no more than twice if it is allowed by the dean of the faculty.

4. Discipline policy

The department accepts qualified students of any race, national or ethnic origin, gender, age, people with special needs, any religion, sexual orientation, veteran status or marital status for all rights, privileges, programs and activities, provided to university students.

It is expected that male and female students will attend all practical classes. If they have missed classes, it is necessary to work them out (according to the schedule on the information stand of the department).

Written and home assignments must be completed in a timely manner, and if students have questions, they can contact the teacher in person or by e-mail, which the teacher will provide at the first practical session.

During the practical lesson, students are recommended to keep a synopsis of the lesson and keep a sufficient level of silence. Asking questions to the teacher is perfectly normal.

Occupational Health

The first lesson of the course will explain the basic principles of labor protection by conducting appropriate training. It is expected that everyone should know where the nearest evacuation exit is, where the fire extinguisher is, how to use it, and so on.

Behaviour in the classroom

Basic "yes" and "no"

It is important for students to follow the rules of good behavior at the university. These rules are common to all, they also apply to all faculty and staff, and are not fundamentally different from the generally accepted norms.

During classes it is allowed:

- to leave the classroom for a short time if necessary and with the permission of the teacher;

- drink soft drinks;

- take photos of presentation slides;

- take an active part in the class

Forbidden:

- eating (except for persons whose special medical condition requires different - in this case, medical confirmation is required);

- smoking, drinking alcohol and even low-alcohol beverages or drugs;

- using obscene language or use words that offend the honor and dignity of colleagues and faculty;

- gambling;

- damaging the material and technical base of the university (damage inventory, equipment; furniture, walls, floors, litter the premises and territories);
- shouting or listening to loud music in classrooms and even in corridors during classes

Practical training

Active participation during the discussion in the classroom, students should be ready to understand the material in detail, ask questions, express their point of view, discuss. During the discussion it is important:

- to respect for colleagues,
- tolerate others and their experience,
- receptivity and impartiality,
- the ability to disagree with the opinion, but to respect the personality of the opponent / s,
- careful argumentation of his opinion and the courage to change his position under the influence of evidence,
- self-expression, when a person avoids unnecessary generalizations, describes his feelings and formulates his wishes based on their own thoughts and emotions,
- mandatory acquaintance with primary sources.

A creative approach in its various manifestations is welcome. Students are expected to be interested in participating in city, national and international conferences, competitions and other events in the subject profile.

5. Academic integrity

The Department of Neurology maintains zero tolerance for plagiarism. Students are expected to constantly raise their awareness of academic writing. The first lessons will provide information on what to consider plagiarism and how to properly conduct research and scientific research.

Students with special needs should meet the teacher or warn him/her before the start of classes, at the request of the student this can be done by the group leader. If you have any questions, please contact the teacher.

6. Recommended references

Educational literature

1. Isaev Yu.A. Segmental-reflex and acupressure in clinical practice. - K. : Health, 1993. - 225p.
2. Lysenyuk V.P, Fadeev V.O, Golovchansky O.M. Reflexology: A textbook. - K. : Khodak, 2002. – 132p.
3. Samosyuk I.Z, Lysenyuk V.P. Acupuncture. Medical encyclopedia. - M.: AST-PRESS BOOK, 2004. - 528p.
4. Ivanichev G.A. Manual therapy: A Guide. Atlas. - Kazan: Kazan University Press, 1997. - 448p.

Auxiliary:

1. Veselovsky V.P. Practical vertebral neurology and manual therapy. - Riga: B.I, 1991. - 344p.
2. Ibragimova V.S. Chinese medicine. Methods of diagnosis and treatment, medicines. Zhen-jiu

therapy. - M.: PKP-Antares, 1994. - 637p.

3. Lakusta V.N. Traditional clinical acupuncture. - Chisinau: European Postgraduate Center of Acupuncture and Homeopathy, 2001. - Vol.1.– 454p.; Vol.2.– 287p.; T.3.– 425p.

4. Levit K., Zahse J., Yanda V. Manual medicine: Transl.from German. - M.: Medicine, 1993.- 512p.

5. Travel J.G., Simmons D.G. Myofascial pain and dysfunctions. A Guide to trigger points: Transl.from English - M.: Medicine, 2005. – Vol.1.– 656p.; Vol.2. – 1192p.

Learning outcomes

As a result of studying the course the student must be able to:

- Identify the main indications and contraindications to the use of reflexology.
- Conduct a special clinical examination of patients and justify the possibility of using the necessary methods of reflexology.
- Determine the location of acupuncture points of general and segmental action.
- Select and combine acupuncture zones depending on the existing functional disorders in the patient.
- Choose effective parameters of acupuncture zones' stimulation for reflex anesthesia.
- Define the key concepts of manual reflexology.
- Choose the necessary acupuncture areas and have a technique of finger acupressure for first aid.
- Determine the indications and perform procedures of distant thermal acupuncture.
- Prescribe superficial multi-needle acupuncture depending on the location of the pathological process.
- To choose effective parameters of electrostimulation for carrying out percutaneous electroneurostimulation and electromyostimulation.
- Manually examine the condition of the muscles and postisometric relaxation of the muscle groups of the limbs and torso.
- Give recommendations for optimizing the regime of static and dynamic loads on the spine and joints of the extremities.

List of questions to the test

1. Sanogenetic processes, their components. Possibilities of influence on them in clinical conditions. The concept of methods of complementary (reinforcing, complementary) medicine.
2. Definition of reflexology, reflexogenic zones.
3. Specifics of puncture reflexology (PR), determination of acupuncture points (ACP), the scheme of reactions to acupuncture.
4. Properties of ACP.
5. Search methods ACP. Using the meridian system and individually proportional segments.
6. ACP of general action and its functional significance.
7. Three main components of PR: place of action.
8. Three main components of PR: action (quantitative and qualitative features).
9. Three main components of PR: the moment of action (time parameters and taking into account the activity of organs and systems).
10. The meridian system as a moment of action.
11. Indications and contraindications to the use of puncture reflexology methods in clinical practice.
12. General principles of irritation dosing in PR.
13. Topography and functional significance of acupuncture points I-7, II-4, II-11.
14. Topography and functional significance of acupuncture points III-36, IV-6, V-7.
15. Topography and functional significance of acupuncture points VI-3, VII-60, VIII-6.

16. Topography and functional significance of acupuncture points IX-6, X-5, XI-34.
17. Topography and functional significance of acupuncture points XII-3, XIII-14, XIII-26.
18. Principles of using segmental (Shu-points) points of acupuncture.
19. Definition of reflex diagnostics and its systematization (local, segmental, meridian, microacupuncture).
20. Organization of the autonomic nervous system. Clinical assessment of the autonomic manifestations direction.
21. Research of vegetative tone, vegetative reactivity and vegetative support of activity.
22. Viscero-sensory phenomenon (Zakhar'ina-Geda's zone).
23. General principles of acupuncture diagnostics: survey, examination, palpation, auscultation, hardware measurements.
24. Local signal (trigger) points (Ashi points) and segmental signal points (Mo-points).
25. Electropuncture diagnostics (standard vegetative test).
26. Microacupuncture systems (MAS) and their properties. Auricular MAS, systematics of its acupuncture zones.
27. Principles of selection and compositions of acupuncture zones.
28. The concept of nociceptive and antinociceptive systems. Endogenous opioids (localization, functions, features of action).
29. Analgesic parameters of acupuncture zones' stimulation.
30. Manual therapy and its scope, types of biomechanical disorders.
31. Therapeutic effects of chiropractic.
32. Features of manual diagnostics, the concept of anatomical and functional barriers.
33. Structural and functional features of joints, spine and their consideration in chiropractic. X-ray diagnostic signs of osteochondrosis of the spine.
34. Acupressure techniques.
35. Simple finger pressing.
36. ACP, most often used in acupressure.
37. Local barotherapy, its therapeutic effects and methods of application.
38. Superficial multi-needle acupuncture (SMNA) and its types, mechanisms of therapeutic action, indications and contraindications.
39. Methods of conducting SMNA.
40. Dosage of irritation in SMNA.
41. Stimulation zones in the SMNA.
42. Methods of heat puncture. General indications for its use.
43. Local cryotherapy.
44. Electrotherapeutic factors in reflexology.
45. Mechanism of analgesic action of PENS: scheme of gate control of pain, classification of nerve fibers.
46. Methods of PENS conducting.
47. Stimulation zones, time parameters of PENS.
48. Electromyostimulation, its therapeutic effects and methods of application.
49. Laser therapy and laser acupuncture: mechanisms of therapeutic action, methods, indications for use.
50. Manual examination of muscle condition.
51. Myofascial trigger points (MFTP), the causes of their occurrence, methods of inactivation of MFTP.
52. Postisometric muscle relaxation, its use at different stages of manual treatment.
53. The most important methods of manual therapy. Relaxation techniques.
54. Automation and auto stabilization.
55. Optimization of the regime of static and dynamic loads on the spine and joints of the extremities. Prevention of biomechanical disorders of the spine and joints.
56. Structural inconsistencies and their correction.

57. Indications and contraindications to manual therapy. Algorithm of manual therapy application.
58. Reflexology as a means of first aid.
59. Reflexology in complex measures for pain syndromes.
60. The use of reflexology in functional disorders in patients of different profiles. International Classification of the ICF Functioning (WHO, 2001).
61. Reflexology as a component of an individual rehabilitation program. Three circles of stimulation of sanogenetic processes.

Acting head of Neurology Department,
Professor, MD

O.L. Tovazhnyanska