



## LITHUANIAN SPORTS UNIVERSITY

### STUDY MODULE PROGRAMME (SMP)

Module Code	B	710	B	051	Accredited until	2020	06	01	Renewal date		
	Branch of Science		Progr.	Registr. №.							

**Entitlement**

Internal Medicine and Geriatric Patient Physiotherapy

**Prerequisites**

Anatomy, Physiology

**Course (module) Learning Outcomes**

№.	Learning Outcomes	Teaching / Learning Methods	Assessment Methods
1		Discussion, Exercise classes, Interactive lecture, Literature analysis, Reading list	Mid-term examination
2		Case analysis (Case study), Discussion, Exercise classes, Interactive lecture	Mid-term examination, Reporting for practice work
3		Case analysis (Case study), Discussion, Exercise classes, Interactive lecture, Reading list	Reporting for practice work
4		Case analysis (Case study), Discussion, Exercise classes, Interactive lecture, Literature analysis	Mid-term examination, Reporting for practice work
5		Case analysis (Case study), Discussion, Exercise classes, Interactive lecture, Literature analysis	Mid-term examination, Reporting for practice work
6		Case analysis (Case study), Discussion, Exercise classes, Interactive lecture, Literature analysis	Mid-term examination, Reporting for practice work

**Main aim**

To provide knowledge about pathological and adaptive changes in human body, internal medicine, examination of patient, interpretation data of examination and planning activity of physiotherapy.

**Summary**

The main pathological and adaptive changes in human body. Internal medicine, examination of patient, interpretation data of examination and planning activity of physiotherapy.

**Level of module**

Level of programme		Subject group (under the regulation of the area)
Cycle	Type	
First	Bachelor	
		Specialaus lavinimo

**Group under financial classification**

9.Reabilitacija ir slauga, sportas (išskyrus trenerius)

**Syllabus**

№.	Sections and themes	Responsible lecturer
1.	Cardiological diseases: congenital and non congenital heart defects. Etiology and clinical manifestation of heart rheumatism	
2.	Cardiological diseases: Hypertensio.Hypotension.Vascular diseases (vasculitis, varicose veins, thrombosis,phlebitis, haemorrhoids)	
3.	Cardiologic diseases: coronary heart disease. Chest angina, classification. Acute myocardial infarction.	
4.	Cardiological diseases: Hypertrophic cardiomyopathy. Dilatory cardiomyopathy. Heart failure and classification. Athletic heart.	
5.	Pulmonological Diseases: Restrictive Lung Diseases. Pneumonia. Sarcoidosis. Pleurisy. Pulmonary emphysema. Pneumothorax.	

№.	Sections and themes	Responsible lecturer
6.	Pulmonological Diseases: Obstructive Pulmonary Diseases. Bronchial asthma. Obstructive bronchitis. Chronic bronchial obstructive disease. Bronchiectatic disease. Respiratory failure and classification.	
7.	Gastroenterological Diseases: Gastritis. Celiac Disease. Crohn's disease.	
8.	Gastroenterological Diseases: Gallstones. Cholecystitis. Hepatitis. Pancreatitis	
9.	Endocrinological diseases: Hyperthyroidism and Hypothyroidism. Addison's disease. Cushing's disease. Osteoporosis	
10.	Endocrinological Diseases: Diabetes Mellitus. Obesity.	
11.	Haematological diseases: Anemia and types. Hemophilia.	
12.	Nephrological diseases: Kidney stones. Pyelonephritis. Acute and chronic glomerulonephritis. Acute and chronic renal failure.	
13.	Aging: changes of body. Physical therapy of geriatric patients. Prevention of fall risk.	
14.	Subjective and objective evaluation of cardiac patient	
15.	Evaluation of function of cardiovascular system. Recovery after different intensity and types of exercises. Cardiac exercise stress testing	
16.	Physiotherapy for patients with ischemic heart disease, angina pectoris and after myocardial infarction	
17.	Physiotherapy for patients with heart rheumatic disease, heart failure, high and low blood pressure.	
18.	Physical activity for prophylaxis of ischaemic heart disease	
19.	Subjective and objective evaluation of pulmonary patient.	
20.	Lung percussion	
21.	Lung auscultation and evaluation of breathing sounds.	
22.	Positional drainage and percussion massage. Static and dynamic breathing exercise techniques.	
23.	Physiotherapy techniques to improve mobility of shoulder girdle and thorax. Exercise for strengthening of breathing muscles.	
24.	Postural correction for patients with lung diseases.	
25.	Subjective and objective evaluation of patient with metabolic diseases.	
26.	Physiotherapy for patients suffering from diseases of metabolic and digestive systems.	
27.	Evaluation of functional status of geriatric patient.	
28.	Prophylaxis of fall risk of geriatric patients.	
29.	Physiotherapy for palliative and coma patients.	
30.	Positioning and transferring of patients.	

Evaluation procedure of knowledge and abilities:

Ten grade criterion scale and summative evaluation system are applied. The semester's individual work tasks are evaluated by grades; the final grade is given during the examination session while multiplying particular grades by the lever coefficient and summing up the products.

References

№.	Title	Edition in Lithuanian Sports University library		In Lithuanian Sports University bookstore	Number of ex. in the methodical cabinet of the depart.
		Pressmark	Number of exemplars		
1.	Vitamin D in Autoimmunity: Molecular Mechanisms and Therapeutic Potential. Dankers et al. Front Immunol. 2017 Jan 20;7:697.			Yes	
2.	Post-mortem study of the association between cardiac iron and fibrosis in transfusion dependent anaemia. Kirk et al. J Cardiovasc Magn Reson. 2017 Mar 27;19(1):36			Yes	

№.	Title	Edition in Lithuanian Sports University library		In Lithuanian Sports University bookstore	Number of ex. in the methodical cabinet of the depart.
		Pressmark	Number of exemplars		
3.	Effect of Diabetes Treatment-Related Attributes on Costs to Type 2 Diabetes Patients in a Real-World Population. Meng et al. J Manag Care Spec Pharm. 2017 Apr;23(4):446-452.			Yes	
4.	The Influence of the Microbiome on Early-Life Severe Viral Lower Respiratory Infections and Asthma— Food for Thought? Lynch et al. Front Immunol. 2017 Feb 16;8:156.			Yes	
5.	Micro-computed tomography and mechanical evaluation of trabecular bone structure in osteopenic and osteoporotic fractures. Ozan et al. J Orthop Surg (Hong Kong). 2017 Jan;25(1):23			Yes	
6.	Effects of Melatonin on Liver Injuries and Diseases. Zhang et al. Int J Mol Sci. 2017 Mar 23;18(4).			Yes	
7.	Significance of clinical and morphological prognostic risk factors in IgA nephropathy: follow-up study of comparison patient groups with and without renoprotection. Riispere et al. BMC Nephrol. 2017 Mar 14;18(1):89.			Yes	
8.	Hepatic mitochondrial dysfunction is a feature of Glycogen Storage Disease Type Ia (GSDIa). Farah et al. Sci Rep. 2017 Mar 20;7:44408.			Yes	
9.	Cardiovascular risk is similar in patients with glomerulonephritis compared to other types of chronic kidney disease: a matched cohort study. Hutton et al. BMC Nephrol. 2017 Mar 20;18(1):95.			Yes	
10.	Lower Extremity Peripheral Artery Disease and Quality of Life Among Older Individuals in the Community. Wu et al. J Am Heart Assoc. 2017 Jan 20;6(1).			Yes	
11.	Females Are Protected From Iron-Overload Cardiomyopathy Independent of Iron Metabolism: Key Role of Oxidative Stress. Das et al. J Am Heart Assoc. 2017 Jan 23;6(1).			Yes	
12.	Hypertension Severity Is Associated With Impaired Cognitive Performance. Muela et al. J Am Heart Assoc. 2017 Jan 11;6(1).			Yes	
13.	Relations Between Aortic Stiffness and Left Ventricular Mechanical Function in the Community. Bell et al. J Am Heart Assoc. 2017 Jan 9;6(1).			Yes	
14.	Down-regulation of hsa-miR-148b inhibits vascular smooth muscle cells proliferation and migration by directly targeting HSP90 in atherosclerosis. Zhang et al. Am J Transl Res. 2017 Feb 15;9(2):629-637.			Yes	
15.	Different impairment of immune and inflammation functions in short and long-term after ischemic stroke. Wen- Xing et al. Am J Transl Res 2017;9(2):736-745.			Yes	



	№. of syllabus	Total hours	Influence on grade, %	Week of presentment of task (*) and reporting (o)																
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17-20
Mid-term examination	1-6	25	25	*					0											
Mid-term examination	7-13	25	25					*		0										
Accounting for practice sessions	14-30	25	25							*								0		
Total:	-	100	100																	

**Study module teaching form №. 2**

Semester		Mode of studies	Structure				Total hours	Credits
			Theory	Seminars	Lab Works	Ind. work		
A	S	D	13	13	17	87	130	5

Languages of instruction:

Lithuanian	L	English	E	Russian	R	French	F	German	G	Other	Oth.
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Plan of in-class hours

№. of Themes	Academic hours			№. of Themes	Academic hours		
	Theory	Seminars	Lab Works		Theory	Seminars	Lab Works
1.	1	1	0	16.	0	0	1
2.	1	1	0	17.	0	0	1
3.	1	1	0	18.	0	0	1
4.	1	1	0	19.	0	0	1
5.	1	1	0	20.	0	0	1
6.	1	1	0	21.	0	0	1
7.	1	1	0	22.	0	0	1
8.	1	1	0	23.	0	0	1
9.	1	1	0	24.	0	0	1
10.	1	1	0	25.	0	0	1
11.	1	1	0	26.	0	0	1
12.	1	1	0	27.	0	0	1
13.	1	1	0	28.	0	0	1
14.	0	0	1	29.	0	0	1
15.	0	0	1	30.	0	0	1
Total:				13      13      17			

Schedule of individual work tasks and their influence on final grade

	№. of syllabus	Total hours	Influence on grade, %	Week of presentment of task (*) and reporting (o)																
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17-20
Scientific paper (text) analysis	1-6	20	20	*					0											
Mid-term examination	1-6	20	25	*					0											
Mid-term examination	7-13	20	25					*		0										
Accounting for practice sessions	14-30	27	30							*								0		
Total:	-	87	100																	