LITHUANIAN SPORTS UNIVERSITY

STUDY MODULE PROGRAMME (SMP)

Mo	dule Code	S		27	'3	В	16S	Accredited			Renewal date	
		В	ranc	h of Scie	ence	Progr.	Registr. №.	until				
Entitl	ement	1 7									1	
Moto	r Control a	nd Lea	rnın	g								
Apote	quisites	veiolo	011									
Cours	oniy and Fi	J oarn	<u>gy</u> ing l	Outcom								
Cours	Learning	Leain	ing v	Outcom	105							
<u>№</u> .	Outcomes		Te	aching	/ Learn	ing Meth	ods		A	ssess	sment Methods	
1			Di ba	scussion sed lear	n, Grou ning, S	ıp work, I leminar	nteractive lectur	Μ	lid-te	erm examination		
2			Di act	scussion tion	n, Forn	nal lecture	e, Group work, I	Reflection on	М	lid-te	erm examination	
3			Ca	se analy	ysis (C	ase study)), Group work		D la	irect bora	ed private tory work	
4	Laboratory classes									abora port	atory notes and	
5			La	borator	y class	es			La	abora	atory examination	
Main	aim											
On the basis of the achievements of modern fundamental and applied movement science, to provide students with knowledge and skills: a) to analyse models, mechanisms and technologies of motor control, learning and development, b) to systematize the achievements of modern fundamental and applied interdisciplinary science, and carrying out applied research, to improve motor control and learning technologies / methodologies in practice.												
Sumn	nary											
Study	v module en	compa	isses	s: a) mee	chanics	s of muscl	le contraction ar	nd relaxation;	b) bio	mec	hanical and	
neuro	physiologi	cal me	chan	iisms, pi	rinciple	es and pat	terns of motor c	ontrol; c) neu	romec	chan	ics of running,	
jumpi	ing, throwin	ng and	mar	nipulativ	ve mov	ements; d	l) motor learning	g theories as w	ell pa	tterr	is, principles and	
neuro	plasticity of	i learn	ing;	e) resea	arcn me rob dot	ethodolog	y of motor cont	rol and learning	ig pro	cess	es; f) application	
	of module	lunuan	nem	ai iesea	i cii uai	a ili piaci						
Level	Level of n	rooran	nme									
Cycle		une	mic			S	ubject group (ur	der the regula	tion o	of the	e area)	
First		ype achalo	r		Bondr	oio univa	reitatinia lavinii	mo				
Grou	n under fins	ncial o		ification	n	ojo unive		110				
Svlla		inorar c	1400	incuro								
No.				Secti	ions an	d themes			Re	espor	nsible lecturer	
1.	Introductio	n to m	otor	control						-spoi		
2.	Anatomy o	f moto	or co	ntrol I								
3.	anatomy of	motor	cor	ntrol II								
4.	Models of	motor	cont	rol								
5.	Regularitie	s and p	orinc	ciples of	f motor	control						
6.	6. Brain plasticity - the basis of learning I											
7.	Brain plast	icity -	the b	basis of	learnir	ng I						
8.	Learning N	eurosc	cienc	ce I								
9.	Learning N	eurosc	cienc	e II								
10.	Basic princ	iples c	of se	nsory m	noveme	ents						

№.	Sections and themes	Responsible lecturer
11.	Stress	

Evaluation procedure of knowledge and abilities:

References

			Edition in Sports Uni	n Lithuanian versity library	In Lithuanian	Number of ex. in the		
№.	Title		Pressmark	Number of exemplars	Sports University bookstore	methodical cabinet of the depart.		
1.	Skurvydas A. Judesių mokslas: r mokymas, valdymas, raumenys, treniravimas, reabilitaciija // Kau	netodologija, sveikatinimas, nas, 2017.		50	Yes			
2.	Skurvydas A. Modernioji neuror judesių valdymas ir proto treniru LKKA, 2011.	eabilitacija: otė // Kaunas,		50	Yes			
3.	Schmidt R.A., Lee T.D. Motor C Learning: A Behavioral Emphasi Illinois: HumanKinetics, 2008.	ontrol and s // Champaign,		1	Yes			
4.	Wolpert, D.M., Diedrichsen, J., I J.R.Principles of sensorimotor le //NatRevNeurosci. 2011 7;12(12	Flanagan, arning). IF: 29.5.			No			
5.	Franklin, D.W., Wolpert, D.M. C mechanisms of sensorimotor con 2011, 3;72(3):425-42. IF:14.9.	Computational trol // Neuron.			No			
6.	Diamond A, Lee K. Intervention executive function development 12 years old // Science. 2011, 19 64. Review. IF: 31.3.	s shown to aid in children 4 to ;333(6045):959-			No			
Add	itional literature							
Nº.	Title							
1.	Wolpert, D.M., Diedrichsen, J., I 2011 7;12(12). IF: 29.5	Flanagan, J.R.Princ	iples of ser	sorimotor lear	ning //Nat Rev Ne	eurosci.		
2.	Schiaffino, S., Reggiani C. Fiber 531. IF: 28.	types in mammalia	an skeletal	muscles // Phy	siol Rev. 2011; 91	l(4):1447-		
3.	Stergiou, N. Innovative Analyses	s of Human Moven	nent. – Cha	mpaign, Illinoi	is: Human Kinetic	es, 2004.		
4.	Enoka, R. Neuromechanics of H	uman Movement //	Champaig	n, Illinois: Hur	nanKinetics, 2008	8.		
Coo	rdinating lecturer					1		
	Position	Degree,	, surname, i	name	Schedule №.			
Sub	Associate Professor				195			
Subt	111121011	Entitlement				Code		

Study module teaching form №. 1

20

							Struct		т	otol				
Semester		Mode	of st	tudies	Theory		Seminars	Lab Works		Ind. work	h	otal	Cre	dits
А	S	D		30)	30		0	200	260		10		
Language	Languages of instruction:													
Lithuania	an L	English	Е	Russia	n R		French	F	Ū	German	G	-	Other	Oth.

Plan of in-class hours

No of Themes		Academic	hours		N₀, of Themes							Ac	ade	mic	h h	hours				
	Theory	Seminars	La	b Works	J1≌, UL J		ne	3	Т	hee	ory	S	emi	nar	s	La	b V	Vorks		
1.	1	0		1	7	'.				3			0)			3	}		
2.	2	0		2	8	5.				3			0)			3	3		
3.	3	0		3	9).				3			0)			3	5		
4.	3	0		3	10.				3			0)			3	5			
5.	3	0	_	3	11.				3			0)			3	5			
6.	3	0		3								-								
Schedule of indiv	nfluence o	n final gr	To ade	ota	ıl:		3()		C)			3	0					
		No. of	Total	Influence	on ando	We	eek	c of	pre	ese	ntm	ent	of t	ask	(*)	and	l rej	porting		
		vllahus	hours		on grade,							((0)	-						
		synabus	nours)	12	3	45	67	78	9 10) 11	12	13	14	15	16	17-20		
Mid-term examina	ation	1-11	100	7	0	*												0		
Reporting for labo work	oratory	2-11	100	3	0	*												0		
	Total:	-	200	10	0]														
Study module teaching form №. 2																				
		Str	uctu	ure	;				Τ		1	1	Τ							
Semester	Ν	Iode of studi	ies	Theory	Semin	nars La			ıb rks	,	Ind. vori	5	hours			Credits				
A S		D		30	30		t '	0)	+	200		2	260			1	0		
Languages of ins	truction:							-										-		
Lithuanian L	Eng	lish E	Russ	ian R	Fren	ch	F	Ŧ		Ge	erma	an	G			Oth	ner	Oth.		
Plan of in-class h	ours																			
		Academic	hours									Ac	Academic hours							
Nº. of Themes	Theory	Seminars	La	b Works	JNº. 01]	her	ne	S	Т	hee	ory	S	emi	nar	s	Lab Works				
1.	1	0		1	7	΄.			3				0)			3	5		
2.	2	0		2	8	5.				3			0)			3	5		
3.	3	0		3	9).				3			0)			3	5		
4.	3	0		3	10	0.				3			0)			3	5		
5.	3	0		3	1	1.				3			0)			3	6		
6.	3	0		3																
						To	ota	ıl:		30)		0)			3	0		
Schedule of indiv	vidual wo	rk tasks and	their ii	nfluence o	n final gr	ade														
		№. of	Total	Influence	on grade,	We	eek	c of	pre	ese	ntm	ent	of ta (o)	ask	(*)	and	l rej	porting		
syllabus hour			nours	%)	12	3	45	67	78	9 10) 11	12	13	14	15	16	17-20		
Mid-term examina	ation	1-11	100	7	0	*	Π	0	Π	Π	0			0				0		
Reporting for labo	oratory	2-11	100	3	0	*	Π	T	\prod								0			
	Total:	-	200	10	0		<u>1 </u>		<u>. 1</u>				1	1	1	1	I	1		

Study module teaching form №. 3

				Structu	Tatal			
Semester		Mode of studies	Theory	Seminars	Lab Works	Ind. work	hours	Credits
Α	S	Ν	30	30	0	200	260	10

Languages of instruction:LithuanianLEnglishE French Other Russian German Plan of in-class hours

No. of Thomas		Academic h	ours	No. of Thomas	Academic hours								
JNº. Of Themes	Theory	Seminars	Lab Works	Jvº. Of Themes	Theory	Seminars	Lab Works						
1.	1	0	1	7.	3	0	3						
2.	2	0	2	8.	3	0	3						
3.	3	0	3	9.	3	0	3						
4.	3	0	3	10.	3	0	3						
5.	3	0	3	11.	3	0	3						
6.	3	0	3										
	Total: 30 0 30												
Schedule of indiv	vidual worl	c tasks and th	eir influence o	n final grade									

	№. of	Total	Influence on grade	Week of presentment of task (*) and reporting (0)													
	syllabus h	nours	%	12	23	4	56	7	89	9 10	11	12	13	14	15	16	17-20
Mid-term examination	1-11	100	70	>	*		0		()			0				0
Reporting for laboratory work	2-11	100	30	2	*											0	
Total:	-	200	100														