



## LITHUANIAN SPORTS UNIVERSITY

### STUDY MODULE PROGRAMME (SMP)

Module Code	S	274	B	054	Accredited until				Renewal date		
	Branch of Science		Progr.	Registr. №.							

Entitlement

Research Methodology

Prerequisites

Introduction to sport science

Course (module) Learning Outcomes

№.	Learning Outcomes	Teaching / Learning Methods	Assessment Methods
1	Students will be able to organize learning activities individually, accept scientifically informed decisions, communicate with the audience and share knowledge	Discussion, One-to-one tutorials, Practical exercises (tasks)	Background reading, Individual work, Self-assessment
2	To know and understand the main conception of scientific research.	Discussion, Formal lecture, Literature analysis	Background reading, Individual work, Scientific paper (text) analysis
3	To know and understand the structure of the research process and will be able to formulate the purpose, tasks and hypothesis (s) of the research, to select the appropriate research methods, will be able to analyse scientific literature and prepare literature review.	Case analysis (Case study), Formal lecture, Literature analysis	Individual project, Scientific paper (text) analysis
4	To know databases and will be able to independently search for scientific information and analyze it. Will be able to analyze research data and draw conclusions. Understand the ethical principles of research.	Practical exercises (tasks), Scientific paper analysis	Individual work
5	Students will understand data measurement scales, numerical data characteristics and data analysis methods. Understand and will be able to perform descriptive data analysis. Understand correlation. Understand parametric and non-parametric data analysis methods and will be able to perform inter-sample checks and make statistical conclusions.	Exercise classes, Literature analysis, Practical exercises (tasks)	Control work

Main aim

Based on knowledge of science educate capabilities of critical thinking, working independently, understand basical terms of scientific research, analyse scientific information, to plan scientific research.

Summary

Essence of scientific work. The distinguishing features of science. Types and design of research. Technique of scientific research. Organizing procedure of research. Peculiarities of scientific work organization. Conceptions of scientific methods (theoretical and empirical). Representation forms of empirical data. Theoretical analysis of the data and conclusions. Key issues in research ethics.

Level of module

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

Group under financial classification

## Syllabus

№.	Sections and themes	Responsible lecturer
1.	Essence of thesis. Features of science. Principles of research ethics	
2.	Process of scientific research. Search for scientific literature, databases. Analysis of scientific literature	
3.	Research problem, object, aim and objectives. Raising hypothesis	
4.	The conception of research method. Quantitative research methods: questionnaire survey, quantitative observation, experiment. Systematical analysis	
5.	What is qualitative research? Qualitative research strategy	
6.	Qualitative data collection methods. Naturalistic observation. Interviews.	
7.	Ensuring the trustworthiness. Analyses of qualitative data	
8.	Representing qualitative findings.	
9.	Introduction. Statistical object. Data collection. Population and sampling methods. Data and measurement scales, data analysis stages. Statistical hypothesis testing. I and II type error.r.	
10.	SPSS program, Data base creation. The main type of variables. Descriptive statistics. Data distribution evaluation.	
11.	Correlation and regression analysis	
12.	Testing hypothesis of the equality of means. Dispersion analysis. Statistical analysis of non-parametric data.	
13.	Formulation and justification of statistical conclusions	
14.	Discussion. Scientific conclusions	

Evaluation procedure of knowledge and abilities:

## 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.	Bhattacharjee, A. (2012). Social science research: Principles, methods, and practices. Prieiga internetu: <a href="http://scholarcommons.usf.edu/oa_textbooks./3">http://scholarcommons.usf.edu/oa_textbooks./3</a>			No	
2.	Bird, S. (2019). Research methods in physical activity and health. London: Routledge (elektroninė knygos versija LSU bibliotekoje)			No	
3.	Cohen, L., Manion, L., Morrison, K. (2013). Research methods in education (7 ed.). London: Routledge.	37,01 Co-49	1	No	1
4.	Kardelis, K. (2016). Mokslinių tyrimų metodologija ir metodai : edukologija ir kiti socialiniai mokslai : vadovėlis. Vilnius: Mokslo ir enciklopedijų leidybos centras.	00Ka413	5	No	1
5.	Kumar, R. (2019). Research methodology: A step-by-step guide for beginners. London: Sage.			No	
6.	Patten, M. L., & Newhart, M. (2018). Understanding research methods. An overview of the essentials. London: Routledge.	OO PA377	1	No	
7.	Pukėnas, K. (2005). Sportinių tyrimų duomenų analizė SPSS programa. Prieiga internetu: <a href="http://emokymas.lsu.lt/course/view.php?id=655">http://emokymas.lsu.lt/course/view.php?id=655</a>			No	

№	Title	Edition in Lithuanian Sports University library		In Lithuania n Sports University bookstore	Number of ex. in the methodical cabinet of the depart.
		Pressmark	Number of exemplars		
8.	Pukėnas, K. (2011). Kokybinių duomenų analizė SPSS programa. Kaunas: LKKA.. Prieiga internetu: <a href="https://www.spssanalize.lt/wp-content/uploads/2014/03/kokybiniu_duomenu_analize_SPSS_programa.pdf">https://www.spssanalize.lt/wp-content/uploads/2014/03/kokybiniu_duomenu_analize_SPSS_programa.pdf</a>			No	
9.	Siddaway, A. P., Wood, A. M., & Hedges, L. V. (2019). How to do a systematic review: a best practice guide for conducting and reporting narrative reviews, meta-analyses, and meta-syntheses. <i>Annual review of psychology, 70</i> , 747-770.			No	
10	Sparkes, A.C., Smith, B. (2014). <i>Qualitative research methods in sport, exercise and health. From practice to product.</i> London: Routledge.	796,01 Sp-11	1	No	1
11	Smith, B., & McGannon, K. R. (2018). Developing rigor in qualitative research: Problems and opportunities within sport and exercise psychology. <i>International review of sport and exercise psychology, 11</i> (1), 101-121.			No	
12	Thomas, J.R., Nelson, J.K., Silverman, S.J. (2015). <i>Research methods in physical activity (7th edition).</i> Human Kinetics: Champaign	796,01 Th31	2	No	
13	Žydzūnaitė, V. (2017). <i>Kokybiniai tyrimai: principai ir metodai :vadovėlis socialinių mokslų studijų programų studentams.</i> Vilnius: Vaga	00 Ži21	1	No	1

#### Additional literature

№.	Title
1.	Cleland, J., Dixon, K., & Kilvington, D. (2019). <i>Online research methods in sport studies.</i> Routledge.
2.	Isaacs, A. N. (2014). An overview of qualitative research methodology for public health researchers. <i>International Journal of Medicine and Public Health, 4</i> (4).
3.	Israel, M., Hay, I. (2009). <i>Research ethics for social scientists.</i> London: Sage Publishing
4.	Kelly, P., Fitzsimons, C., & Baker, G. (2016). Should we reframe how we think about physical activity and sedentary behaviour measurement? Validity and reliability reconsidered. <i>International Journal of Behavioral Nutrition and Physical Activity, 13</i> (1), 32.
5.	Maslauskaitė, A. (2008). <i>Mokslo tiriamojo darbo metodologijos pagrindai.</i> Vilnius: Generolo Žemaičio Lietuvos karo akademija.
6.	Molnar, G. & Purdy, L. (2015). <i>Ethnographies in Sport and Exercise Research.</i> London: Routledge
7.	Nigg, C. R., Fuchs, R., Gerber, M., Jekauc, D., Koch, T., Krell-Roesch, J., ... & Woll, A. (2020). Assessing physical activity through questionnaires—A consensus of best practices and future directions. <i>Psychology of Sport and Exercise, 101715.</i>
8.	O'donoghue, P. (2009). <i>Research methods for sports performance analysis.</i> Routledge.
9.	Paunksmienė, Ž., Banytė, J. (2013). Kokybiniai vartotojų elgsenos tyrimai internetu: Metodologiniai iššūkiai. <i>Socialinės technologijos, 3</i> (2), 261-277.
10.	Skurvydas, A. (2008). <i>Senasis ir naujasis mokslas.</i> Vilnius: Lietuvos sporto informacijos centras
11.	Skurvydas, A. (2010). <i>Apie mokslą, tiesą ir pažangą.</i> Kaunas: Vitae Litera

#### Coordinating lecturer

Position	Degree, surname, name	Schedule №.
Professor		33

#### Subdivision

Entitlement	Code

## Study module teaching form №. 1

Semester	Mode of studies	Structure				Total hours	Credits	
		Theory	Seminars	Lab Works	Ind. work			
A	S	D	15	45	0	200	260	10

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	0	0	8.	1	2	0
2.	1	4	0	9.	1	3	0
3.	2	4	0	10.	1	5	0
4.	2	3	0	11.	0	4	0
5.	1	2	0	12.	1	10	0
6.	1	2	0	13.	0	3	0
7.	2	3	0	14.	1	0	0
Total:					15	45	0

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
Literature analysis	2,3	30	15			*	0													
Individual Homework	1,2,3	30	10			*	0													
Individual Homework	3,4	20	10				*	0												
Test	9-13	30	15					*	0											
Accounting for practice sessions	6-8	40	20					*		0										
Control work	9-13	25	15					*		0										
Group (team) project	10-13	25	15					*		0										
Total:	-	200	100																	

## Study module teaching form №. 2

Semester	Mode of studies	Structure				Total hours	Credits	
		Theory	Seminars	Lab Works	Ind. work			
A	S	N	15	45	0	200	260	10

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	0	0	8.	1	2	0
2.	1	4	0	9.	1	3	0
3.	2	4	0	10.	1	5	0
4.	2	3	0	11.	0	4	0
5.	1	2	0	12.	1	10	0
6.	1	2	0	13.	0	3	0

№. of Themes	Academic hours			№. of Themes	Academic hours		
	Theory	Seminars	Lab Works		Theory	Seminars	Lab Works
7.	2	3	0	14.	1	0	0
				Total:	15	45	0

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
				Literature analysis	2,3	30	15			*	0									
Individual Homework	1-3	30	10				*	0												
Individual Homework	3,4	20	10					*	0											
Test	9-13	30	15						*	0										
Accounting for practice sessions	6-8	40	20							*	0									
Control work	9-13	25	15							*	0									
Group (team) project	10-13	25	15							*		0								
Total:	-	200	100																	

### Study module teaching form №. 3

Semester	Mode of studies	Structure				Total hours	Credits	
		Theory	Seminars	Lab Works	Ind. work			
A	S	D	15	45	0	200	260	10

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	0	0	8.	1	2	0
2.	1	4	0	9.	1	3	0
3.	2	4	0	10.	1	5	0
4.	2	3	0	11.	0	4	0
5.	1	2	0	12.	1	10	0
6.	1	2	0	13.	0	3	0
7.	2	3	0	14.	1	0	0
				Total:	15	45	0

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
				Literature analysis	2,3	30	15			*	0									
Individual Homework	1-3	30	10				*	0												
Individual Homework	3,4	20	10					*	0											
Test	9-13	30	15						*	0										
Accounting for practice sessions	6-8	40	20							*	0									
Group (team) project	10-13	25	15										*	0						
Control work	9-13	25	15												*	0				
Total:	-	200	100																	

### Study module teaching form №. 4

Semester		Mode of studies	Structure				Total hours	Credits
			Theory	Seminars	Lab Works	Ind. work		
A	S	N	15	45	0	200	10	

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	0	0	8.	1	2	0
2.	1	4	0	9.	1	3	0
3.	2	4	0	10.	1	5	0
4.	2	3	0	11.	0	4	0
5.	1	2	0	12.	1	10	0
6.	1	2	0	13.	0	3	0
7.	2	3	0	14.	1	0	0
				Total:	15	45	0

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
Literature analysis	2,3	30	15			*	0													
Individual Homework	1-3	30	10			*	0													
Individual Homework	3,4	20	10				*	0												
Test	9-13	30	15					*	0											
Accounting for practice sessions	6-8	40	20					*	0											
Control work	9-13	25	15					*	0											
Group (team) project	10-13	25	15					*		0										
Total:	-	200	100								0									