



## LITHUANIAN SPORTS UNIVERSITY

### STUDY MODULE PROGRAMME (SMP)

Module Code	S	274	B	043	Accredited until				Renewal date		
	Branch of Science		Progr.	Registr. №.							

Entitlement

Informacija ruošiamą

Prerequisites

Nutrition module

Main aim

On the basis of fundamental and applied scientific knowledge, to develop students' ability to organize their activities, make science-based solutions, to be able to express conceptual ideas of science-based knowledge, plan scientific research and carry it out.

Provided knowledge and abilities

Students will be able to organize learning activities individually, accept scientifically informed decisions, communicate with the audience and share knowledge, knows the basic concepts of a scientific research and understand the planning stages, knows the scientific databases and is able to independently search for information and analyse it, knows the criteria for the research methods selection and is able to create and use the valid questionnaires in the survey research, use observation and interviewing techniques, Understands and is able to apply the principles of epidemiological study design.

Summary

Informacija ruošiamą

Level of module

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

Group under financial classification

Syllabus

№.	Sections and themes	Responsible lecturer
1.	Introduction to research methods	33 prof. dr. Saulius Šukys
2.	Concepts, objects and applications of epidemiology science	903 doc. dr. Miglė Bacevičienė
3.	The main health determinants and their monitoring and control methods in a population level	903 doc. dr. Miglė Bacevičienė
4.	Population studies. Types of the random samples and sample size calculation. Response rate. Surveys of non-responders.	903 doc. dr. Miglė Bacevičienė
5.	Baseline health examinations: types and organization methods. Questionnaires and information collection methods.	903 doc. dr. Miglė Bacevičienė
6.	Methods and designs of the observational and interventional epidemiological studies. The associations between the exposure and the outcome.	903 doc. dr. Miglė Bacevičienė
7.	Potential errors in epidemiological studies and their control methods. Random and systematic errors. The confounding effect and control of confounders.	903 doc. dr. Miglė Bacevičienė
8.	Introduction to statistics. Population and sampling, characteristics of distributions. The concept and types of randomization.	903 doc. dr. Miglė Bacevičienė
9.	Data collection. Database designing and management in SPSS. Types of variables (continuous, categorical).	903 doc. dr. Miglė Bacevičienė
10.	Types of statistical hypotheses. Descriptive and comparative statistics, relations between variables.	903 doc. dr. Miglė Bacevičienė

No.	Sections and themes	Responsible lecturer
11.	Parametric testing methods of hypothesis on equality of averages. Non-parametric statistical hypothesis testing criteria.	903 doc. dr. Miglė Bacevičienė
12.	Primary data analysis and presentation.	903 doc. dr. Miglė Bacevičienė
13.	Final research project	33 prof. dr. Saulius Šukys

Teaching/learning methods:

Problem-based teaching, group discussion, demonstration, explanation, case studies, computer classes practise.

Evaluation procedure of knowledge and abilities:

References

No.	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.	Carlson, M.D.A., Morrison, R.S. (2009). Study design, precision, and validity in observational studies. <i>Journal of Palliative Medicine</i> , 12 (1), 77–82.			No	
2.	Cohen, L., Manion, L., Morrison, K. (2009). <i>Research methods in education</i> (6 ed.). London: Routledge.			No	
3.	Bonita, R., Beaglehole, R., Kjellstrom, T. (2007). <i>Basic epidemiology</i> . World Health Organization, WHO Press, Geneva, Switzerland.			No	
4.	Field, A. (2005). <i>Discovering statistics using SPSS</i> , 2nd edn. London: Sage publications.			No	
5.	Croswell, J.W. (2015). <i>30 essential skills for the qualitative researcher</i> . London: Sage publication.			No	
6.	Marczyk, G.R., DeMatteo, D., Festinger, D. (2005). <i>Essentials of Research Design and Methodology</i> . John Wiley & Sons, Inc, Hoboken, New Jersey.			No	
7.	Sparkes, A.C., Smith, B. (2014). <i>Qualitative research methods in sport, exercise and health. From practice to product</i> . London: Routledge.			No	
8.	Thomas, J.R., Nelson, J.K., Silverman, S.J. (2011). <i>Research methods in physical activity</i> (6th edition). Human Kinetics: Champaign.			No	

Additional literature

No.	Title
1.	Creswell, J.V., Clark, V.L., Plano, C. (2007). <i>Designing and conducting mixed methods research</i> . Sage Publications
2.	Dishman, R., Heath, G., Washburn, R. (2004). <i>Physical activity epidemiology</i> . Champaign, Illinois: Human Kinetics.
3.	Rothman, K., Greenland, S., Lash, TL. (2008). <i>Modern Epidemiology</i> . Lippincott Williams & Wilkins
4.	Alan Bryman, Duncan Cramer (2008). <i>Quantitative Data Analysis with SPSS 14, 15 and 16</i> . Routledge: Taylor Francis.
5.	Perneger, T.V., Courvoisier, D.S., Hudelson, P.M., Goyet-Ageron, A. (2015). Sample size pre-tests of questionnaires. <i>Quality of Life Research</i> , 24, 147-151.

