

Title of the Course		STATISTICS	
Amount in credit points/ECTS)	2/3	Volume (in hours)	80
Prior knowledge	Math at the level of a secondary school		
Science Sector	Math		
Science Subsector	-		
Summary of academic hours		Amount (academic hours)	
Distance learning		40	
Contact hours / video lessons		8	
Exercises, self – assessment questions and tests		14	
Individual work/ discussions in distance		16	
Exams/tests		2	
1 <sup>st</sup> level professional study programme	Personnel Psychology and Human Resource Management		
Author(s) of the course	Mg.psych. Līga Roķe-Reimate		
Lecturer(s) of the course	Mg.psych. Līga Roķe-Reimate		
Goal of the course:	To give an idea to students about the statistics and statistical indicators, develop the skills to use the methods of statistics both in the production of the qualification work and in the research of processes and their influence in an enterprise.		
Requirements for obtaining credit points (structure of course evaluation):	<u>The final evaluation is calculated:</u> Moodle discussion/tasks – 50% Exam – 50% <i>For obtaining final evaluation, both activities should hold successful evaluation – not below 4 points.</i> <i>Final evaluation is the average grade in 10-point system, in proportion of percentage distributed amongst both activities</i>		
Study Results			
1. <i>Knowledge:</i> 1.1. A student recognizes the terminology and statistical indicators, their application possibilities in the research of an enterprise; 1.2. A student lists the selection sets of formation principles, as well as different types of statistical scales 1.3. A student describes the differences between descriptive and analytical statistics. 2. <i>Skills:</i> 2.1.A student calculates average tendencies, dynamics, structure and index indicators; 2.2. A student portrays statistical indicators in tables and graphic images. 3. <i>Competences:</i> 3.1.A student plans and does statistical observations, as well as carries out the statistical analysis of the gained results. 3.2.A student assesses the shortcomings of the used methods or during the calculation, offers solutions.			
Content of the Course			

No.	Subjects	Contact hours, video, audio lessons	Distance learning	Exercises, self- assessment questions and tests	Individual task – remote discussion. Description of the individual task is available in the E-studies	Exam
1.	Statistics and its meaning in entrepreneurship	8	4	2	2	2
2.	Statistical indicators, the ways of their depiction		5	2	2	
3.	Selection method of statistical indicators collection		4	2	2	
4.	Statistical scales and their use in data collection and processing		5	2	2	
5.	Data statistical clean-up or grouping		5	2	2	
6.	Descriptive statistics. Variation indicators, their use in enterprise research		5	2	2	
7.	Dynamics indicators, their use in enterprise research. Index method		5	2	2	
8.	Concluding statistics: research of coherency and statistically significant differences		5	2	2	
<b>TOTAL:</b>		8	38	16	16	2
<b>80</b>						

**Mastering the course and successfully passing examination, student is capable of (knowledge, skills and competencies)**

Study Results:	Evaluation Criteria		
	(40-69%)	(70-89%)	(90-100%)
<b>Knowledge</b>	Recognize the meaning of basic notions of statistics, explain the meaning of average arithmetic indicators and name the formula of average	Recognize most notions of statistics; explain the meaning of moda and median indicators, name the formula of moda and medium, which is needed for the	Define the meaning of all notions of statistics; explain the difference between average arithmetic, moda and median; explain the difference

	arithmetic indicators, which is needed for the analysis of a certain data set; explain the notion of absolute growth; define the indicator with the biggest influence on the average weighted indicator	analysis of definite data set; explain notions of the foundation and chain growth; define the use possibilities of descriptive and concluding statistics	between the relative base and chain growth; describe the principles of index indicator formation and theoretical reason for average weighted indicators; explain the difference between descriptive and concluding statistics
<b>Skills</b>	Depict the gathered statistical data and name the amount of their data; use Excel or Google Sheets programmes to modify the given examples; summarize, group and put the gained data in the table; calculate the obsolete changes, average arithmetic, absolute growth, average weighted to group; name the research object.	Argument data collection method and procedure; use Excel or Google Sheets programme for making simple arithmetic formulas; arrange data in the logical sequence; calculate the indicators of relative change, moda and median, average arithmetic, data divided in intervals; describe the observations; use at least one coherence defining method.	In detail explain the methods of statistical data collection, processing and grouping; use Excel or Google Sheets programme for making complex arithmetic formulas; arrange and group data and depict it; calculate all necessary indicators for demographic change and combine them; calculate absolute and relative base indicators, 2 factor index changes; use several coherence defining methods
<b>Competences</b>	Correctly and responsibly describe the gained statistical indicators, as well as identify unsuccessfully chosen methods and unprecise calculations	Generally describe researched process and basic tendencies of occurrence; make justifiable conclusions; argument the strengths and weaknesses used data gathering and depiction methods; critically assess unsuccessfully done calculations and	Make conclusions about the gained data and calculation indicators and widely analyse the changes of indicators and their influencing factors; critically assess the result depiction methods and plan alternative solutions.

		their reasons	
<b>Acknowledgement of the obtained study results</b>			
<b>Study Results</b>	<b>1.</b>	<b>2.</b>	<b>3.</b>
<b>Evaluation Method</b>			
Moodle discussions/tasks	X	X	X
Exam	X	X	X

**Core Literature**

1.	Kristapsone, S. (2020). Statistiskās analīzes metodes pētniecībā. Rīga: Biznesa augstskola Turība
2.	Arhipova I., & Bāliņa, S. (2006). Statistika ekonomikā un biznesā: risinājumi ar SPSS un MS Excel. Rīga: Datorzinību centrs.
3.	Goša, Z. (2001). Statistika. Rīga: LU.
4.	Krastiņš, O., & Ciemiņa, I. (2003). Statistika. Rīga: CSP.
5.	Vergina, G., & Kārklīņa, V. (2003). Statistika ekonomistiem. Rīga: Kamene.

**Additional Literature**

1.	Orlovska, A., & Jurgelāne, I. (2016). Ekonomiskā statistika : [teorija, piemēri, uzdevumi]. Rīga: RTU.
2.	Spiegel, M.R., & Stephens, L.J. (2014). Statistics. New York: McGraw Hill.
3.	Kristapsone, S. (2014). Zinātniskā pētniecība studiju procesā. Otrais aktualizētais izdevums. Rīga: Biznesa augstskola Turība
4.	Witte, R.S., & Witte, J.S. (2017). Statistics (11th Ed.). Hoboken, NJ: John Wiley and Sons.

**Recommended Periodicals**

1.	Introduction to Statistics. <a href="https://www.youtube.com/watch?v=LMSyiAJm99g">https://www.youtube.com/watch?v=LMSyiAJm99g</a>
2.	Crash Course Statistics. <a href="https://www.youtube.com/watch?v=sxQaBpKfDRk">https://www.youtube.com/watch?v=sxQaBpKfDRk</a>
3.	Beginners: Statistics 4 beginners. <a href="https://ec.europa.eu/eurostat/statistics-explained/index.php/Beginners:Statistics_4_beginners">https://ec.europa.eu/eurostat/statistics-explained/index.php/Beginners:Statistics_4_beginners</a>