

## COURSE DESCRIPTION

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| <b>Academic year:</b> 2022/2023  |  |
| <b>University:</b> Comenius University Bratislava  |  |
| <b>Faculty:</b> Faculty of Pharmacy  |  |
| <b>Course ID:</b><br>FaF.KFChL/13-Bc/22  | <b>Course title:</b><br>Basics of Applied Statistics |
| <b>Educational activities:</b><br><b>Type of activities:</b> practicals / lecture<br><b>Number of hours:</b><br><b>per week:</b> 2 / 1 <b>per level/semester:</b> 28 / 14<br><b>Form of the course:</b> on-site learning   |  |
| <b>Number of credits:</b> 5  |  |
| <b>Recommended semester:</b> 1.  |  |
| <b>Educational level:</b> I.   |  |
| <b>Prerequisites:</b>  |  |
| <b>Course requirements:</b><br><p>The student is obliged to complete all computational seminars designated by the teacher and submit a written project plan in the middle of the semester (0-6 points). The topic of the project is in the field of health science and on the basis of consultation and approval by the teacher. There will be at least two continuous readiness checks (0-4 points) during the semester. The final evaluation of the student at the seminars will be determined as the sum of the average evaluation of the interim reviews and the evaluation for the elaboration of the project plan. To successfully complete the seminars, it is necessary to obtain at least 6 points.</p> <p>The exam of the subject is combined and consists of the elaboration of the project and the presentation of its results in the form of a defense, which the students complete during the examination period. Acceptance of the written elaboration of the project is conditioned by submitting the project plan and obtaining at least 2 points for the plan. The written work of the project must contain, in addition to the formal requirements specified by the teacher, a complete statistical processing of the approved topic: collection of original data, their pre-processing and presentation, calculations of descriptive and survey characteristics and interpretation of these results. Points are awarded for the written work for the topicality of the topic, the scope of the processed data, the adequacy of the methods used, the accuracy of the calculations and the formal processing of the report. Submission of a written project work is a necessary condition for passing the exam. The presentation is evaluated in the categories of readiness of the presenter, comprehensibility of the presentation, ability to argue, ability to respond to questions and graphic design of the presentation. Points in the range of 0-4 are awarded for each of these categories.</p> <p>The overall evaluation of the student for the subject consists of evaluation at seminars (0-10 points), evaluation of written work (0-20 points) and evaluation of presentation (0-20 points) as a simple sum of points. The maximum point value is 50: A 45-50 points, B 40-44 points, C 36-39 points, D 33-35 points, E 30-32 points.</p> |  |
| <b>Learning outcomes:</b><br><p>After completing the course, the student has a basic orientation in applied statistical methods of quality assessment of laboratory and production processes, including evaluation and outputs, in methods applied in epidemiology and drug policy and finally in applied statistical procedures of</p>  |  |

health supply and organization management, can design, plan, manage and evaluate basic statistical observation and simple statistical experiment.

**Class syllabus:**

The curriculum focuses on basic definitions, interpretation of the problem and the most necessary computational relationships, which are explained by a number of practical examples. Students can deepen the theoretical knowledge acquired in lectures at computing seminars, where the solution of model problems occurring is practiced using ICT.

The exam in the subject Applied Statistics for Pharmacists consists of elaboration and defense of the year's work, according to the interest of the student and in consultation with the teacher, but it must contain a complete statistical processing and interpretation of the selected pharmaceutical problem.

**Recommended literature:**

Fazekaš, T.: Moderná aplikovaná štatistika pre farmaceutov. 1st ed. Bratislava: UK, 2000.

Hanousek, J., Charazma, P.: Moderní metody spracování dat : matematická statistika pro každého. Praha: Grada, 1992. 216 p.

Meloun, M., Militký, J.: Statistické zpracování experimentálních dat. Praha: Plus, 1994. 23, 839 p.

**Languages necessary to complete the course:**

**Notes:**

**Past grade distribution**

Total number of evaluated students: 0

| A   | ABS | B   | C   | D   | E   | FX  |
|-----|-----|-----|-----|-----|-----|-----|
| 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |

**Lecturers:** RNDr. Tomáš Fazekaš, PhD., RNDr. Alexander Búcsi, PhD.

**Last change:** 31.03.2022

**Approved by:** RNDr. Tomáš Fazekaš, PhD.