

General Information			
Course name	ÚCHV/PBC1/00 Biochemistry Practical	ECTS Credits	6
		Semester	summer
Aims			
<p>To allow students to get practical experience in experimental techniques and methods, currently used in a biochemical research: UV/VIS spectrophotometry, thin layer chromatography (TLC), gel electrophoresis, isolation of macromolecules and substances from biological materials and their quantitative and qualitative determination.</p>			
Content			
<p>The most important biochemical laboratory methods. The qualitative tests for amino acids and proteins. Time-dependent course of enzyme-catalyzed reaction: determination of enzymatic activity, determination of the first order rate constant, calculations of math models (examples), effect of a substrate concentration on initial rate of reaction, determination of K_m and V_{max} for urease. Isolation and detection of nucleic acids.</p>			
Assessment Methods and Criteria			
<p>2 written tests protocols + 75 % continuous evaluation</p>			
<p>Grading Scale (in %): 100-91%-A, 90-81%-B, 80-71%-C, 70-61%-D, 60-51%-E, 50-0%-FX</p>			

Grading System:

The University recognises the following six degrees for the evaluation of the study results:

- a) A – excellent (excellent results) (numerical value 1)
- b) B – very good (above average results) (1.5)
- c) C – good (average results) (2)
- d) D – satisfactory (acceptable results) (2.5)
- e) E – sufficient (results meet the minimum criteria) (3)
- f) FX – failed (requires further work) (4)

Bibliography

Sedlák, Danko, Varhač, Paulíková, Podhradský: Practical exercises from biochemistry, 2007
(English translation of the specific exercises upon request)

