# **CONTENT**

1. Active presentation of results at a national conference with international participation	3
2. Active presentation of results at an international conference abroad	4
3. Active presentation of results at the national conference	5
4. Analytical Methods in Biochemistry	
5. Analytical Methods in Biochemistry	
6. Co-solver of a national project (VEGA, KEGA, APVV)	
7. Co-solver of an international project	
8. Co-solver of internal grant (VVGS)	
9. Consultation of ŠVOČ	
10. Defence of Doctoral Thesis.	
11. Dissertation examination.	16
12. English Language for PhD Students of Faculty of Medicine	. 17
13. Individual study of scientific literature	
14. Internship abroad - more than 30 days.	
15. Internship abroad - of less than 30 days	. 21
16. Lecture on research seminar at the department or clinic.	. 22
17. Molecular Biology	. 23
18. Obtaining an internal grant UPJŠ (VVGS) or scientific project for young researchers by Facu	lty
of Medicine - as a responsible solver	25
19. Pharmacology	26
20. Preparation of the thesis for dissertation examination.	. 28
21. Prevention and treatment activities (per semester)	30
22. Research Methodology and Statistics	
23. Responses to the scientific work in which the doctoral student is as a co-author - registered in	
foreign scientific journal	33
24. Responses to the scientific work in which the doctoral student is as a co-author - registered in	ıa
$\mathbf{J}$	34
25. Responses to the scientific work in which the doctoral student is as a co-author - registered in	
databases SCI or Scopus	
26. Responses to the scientific work in which the doctoral student is as the 1st author - registered	
	36
27. Responses to the scientific work in which the doctoral student is as the 1st author - registered	
a national scientific journal	
28. Responses to the scientific work in which the doctoral student is as the 1st author - registered	
databases SCI or Scopus	
29. Review of bachelor thesis	
30. Scientific communication and research projects management	
32. Scientific work as a monograph, published in • publishers Elsevier, Springer, WileyBlackwell	
Taylor & Francis	
33. Scientific work published in a foreign journal as a co-author	
34. Scientific work published in a foreign journal as the 1st author	
35. Scientific work published in an unreviewed foreign or national proceeding as a co-author	
36. Scientific work published in an unreviewed foreign or national proceeding as a co-author	ŧ∪
author	47
37. Scientific work published in in a national magazine, respective in in a peer-reviewed foreign	
national proceeding as a co-author.	
1 5	

38. Scientific work published in in a national magazine, respective in in a peer-reviewed foreign of	r
national proceeding as the 1st author	49
39. Scientific work published in the journal registered in the WoS/Scopusus databases - as a co-	
author in the journal which is included in category Q1	.50
40. Scientific work published in the journal registered in the WoS/Scopusus databases - as a co-	
author in the journal which is included in category Q2	.51
41. Scientific work published in the journal registered in the WoS/Scopusus databases - as a co-	
author in the journal which is included in category Q3	.52
42. Scientific work published in the journal registered in the WoS/Scopusus databases - as a co-	
	.53
43. Scientific work published in the journal registered in the WoS/Scopusus databases - as the 1st	
author in the journal which is included in category Q1	
44. Scientific work published in the journal registered in the WoS/Scopusus databases - as the 1st	
author in the journal which is included in category Q2	
45. Scientific work published in the journal registered in the WoS/Scopusus databases - as the 1st	
	.56
46. Scientific work published in the journal registered in the WoS/Scopusus databases - as the 1st	
author in the journal which is included in category Q4	
47. Statistical methods in scientific work	
48. Submission of dissertation thesis for defense.	
49. Supervision of bachelor thesis.	
50. The direct pedagogical activity	
51. Work in the conference organizing committee	
v 1. 11011x 111 1110 0011101 01100 015411141115 0011111111100	. 00

University: P. J. Šafárik University in Košice Faculty: Faculty of Medicine Course ID: Dek. **Course name:** Active presentation of results at a national conference with LF UPJŠ/APV-DK international participation +Z/22Course type, scope and the method: **Course type: Recommended course-load (hours):** Per week: Per study period: Course method: present **Number of ECTS credits: 5** Recommended semester/trimester of the course: Course level: III. **Prerequisities: Conditions for course completion:** Active presentation of results at a national conference with international participation. The doctoral student states the activity in the doctoral annual report and these activities are relevantly documented (e.g. publication, program). **Learning outcomes:** By actively participating in a scientific conference, the doctoral student demonstrates a high level of knowledge and ability to identify, evaluate, correctly apply scientific knowledge and research methods. Demonstrates competence to use existing knowledge and generate new original scientific knowledge that he can critically analyse and communicate to a wider audience by adequate means (e.g. lecture, poster). **Brief outline of the course: Recommended literature: Course language:** 

english, slovak

#### Notes:

## Course assessment

Total number of assessed students: 39

abs	neabs
100.0	0.0

#### **Provides:**

Date of last modification: 23.03.2022

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

**Course ID:** Dek. LF | **Course name:** Active presentation of results at an international conference

UPJŠ/APV-MK/22 abroad

Course type, scope and the method:

**Course type:** 

**Recommended course-load (hours):** 

Per week: Per study period: Course method: present

Number of ECTS credits: 10

Recommended semester/trimester of the course:

Course level: III.

**Prerequisities:** 

## **Conditions for course completion:**

Active presentation of results at an international conference abroad.

The doctoral student states the activity in the doctoral annual report and these activities are relevantly documented (e.g. publication, program).

## **Learning outcomes:**

By actively participating in a scientific conference, the doctoral student demonstrates a high level of knowledge and ability to identify, evaluate, correctly apply scientific knowledge and research methods. Demonstrates competence to use existing knowledge and generate new original scientific knowledge that he can critically analyse and communicate to a wider audience by adequate means (e.g. lecture, poster).

#### Brief outline of the course:

#### **Recommended literature:**

## Course language:

english, slovak

**Notes:** 

#### Course assessment

Total number of assessed students: 33

abs	neabs
100.0	0.0

**Provides:** 

Date of last modification: 23.03.2022

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

**Course ID:** Dek. LF | **Course name:** Active presentation of results at the national conference

UPJŠ/APV-DK/22

Course type, scope and the method:

**Course type:** 

Recommended course-load (hours):

Per week: Per study period: Course method: present

**Number of ECTS credits: 2** 

## Recommended semester/trimester of the course:

Course level: III.

## **Prerequisities:**

### **Conditions for course completion:**

Active presentation of results at the national conference.

The doctoral student states the activity in the doctoral annual report and these activities are relevantly documented (e.g. publication, program).

## **Learning outcomes:**

By actively participating in a scientific conference, the doctoral student demonstrates a high level of knowledge and ability to identify, evaluate, correctly apply scientific knowledge and research methods. Demonstrates competence to use existing knowledge and generate new original scientific knowledge that he can critically analyse and communicate to a wider audience by adequate means (e.g. lecture, poster).

#### Brief outline of the course:

#### **Recommended literature:**

## Course language:

english, slovak

## **Notes:**

#### Course assessment

Total number of assessed students: 34

abs	neabs
100.0	0.0

## **Provides:**

Date of last modification: 23.03.2022

COURSE INFORMATION LETTER				
University: P. J. Šafárik University in Košice				
Faculty: Faculty of M	Faculty: Faculty of Medicine			
Course ID: ULCHBKB/ AMB/22	Course name: Analytical Methods in Biochemistry			
Course type: Semin Recommended cour Per week: 2 Per stu	Course type, scope and the method: Course type: Seminar Recommended course-load (hours): Per week: 2 Per study period: 28 Course method: present			
Number of ECTS cr	edits: 5			
Recommended seme	ster/trimester of the cours	e:		
Course level: III.				
Prerequisities:				
Conditions for course completion: seminars, practical exercises, solving of assigned tasks, exam; more details: https://www.upjs.sk/lekarska-fakulta/en/department/medical-and-clinical-biochemistry/education/subjects/doctoral-study/				
Learning outcomes:  Students will master the analytical methods used in laboratories with a focus on application in clinical-biochemical diagnostics both theoretically and practically. They can analyze biological material (eg body fluids) using laboratory analytical techniques (eg spectrophotometry, fluorescence analysis, chromatography, electrophoresis).				
Brief outline of the course:  Laboratory techniques. Optical methods. Insulation techniques. Electrophoretic techniques Physico-chemical methods of separation and detection of substances. Immunoanalytical methods. More details: https://www.upjs.sk/lekarska-fakulta/en/department/medical-and-clinical-biochemistry/education/subjects/doctoral-study/				
Recommended literature:  Lottspeich F., Engels J.W.:Bioanalytics: Analytical Methods and Concepts in Biochemistry and Molecular Biology, Willey, 2019 Locatelli M, Celia Ch.:Analytical Chemistry, NOVA, 2017 Current scientific and professional publications				
Course language: english, slovak				
Notes:				
Course assessment Total number of asse	Course assessment Total number of assessed students: 8			
	Ne Pr			

100.0

0.0

**Provides:** doc. Ing. Katarína Dubayová, PhD., doc. RNDr. Vladimíra Tomečková, PhD., univerzitná profesorka, prof. Ing. Mária Mareková, CSc.

Date of last modification: 17.02.2023

University: P. J. Šafárik University in Košice Faculty: Faculty of Medicine Course ID: Course name: Analytical Methods in Biochemistry ULCHBKB/BNK/22 Course type, scope and the method: Course type: Seminar Recommended course-load (hours): Per week: 2 Per study period: 28 Course method: present Number of ECTS credits: 5 Recommended semester/trimester of the course: Course level: III. **Prerequisities: Conditions for course completion:** seminars, practical exercises, solving of assigned tasks. exam: more details: https://www.upjs.sk/lekarska-fakulta/en/department/medical-and-clinical-biochemistry/ education/subjects/doctoral-study/ **Learning outcomes:** The graduate masters the theoretical and practical foundations of laboratory methods used in the study of nucleic acids (NA) and knows the current possibilities of gene therapy. Students are aware of the latest trends in the study of RNA molecules, including non-coding RNAs, which are increasingly contributing to the improvement of laboratory diagnostics of pathological conditions at the molecular level. The graduate is oriented in the possibilities of using NA for diagnostic and prognostic purposes, as molecular methods are becoming an essential part in the study of biochemical processes and in clinical-biochemical diagnostics. **Brief outline of the course:** DNA replication. Transcription. Proteosynthesis. Regulation of gene expression. Non-coding RNA. Isolation of NK from biological material. Molecular-biochemical methods (eg PCR, sequencing, hybridization). Basics of genetic material analysis. Use of special analyzes. The latest trends in medical laboratory diagnostics. More details: https://www.upjs.sk/lekarska-fakulta/en/department/ medical-and-clinical-biochemistry/education/subjects/doctoral-study/ **Recommended literature:** Blanco G., Blanco A.: Medical Biochemistry, Academic Press, 2017 Waye M.M.Y.: Biochemistry and Molecular Biology, Nova Science Publishers Inc., 2015 Nussbaum R.L. et al.: Genetics in Medicine, Elsevier, 2015 Strachan T. et al.: Genetics and Genomics in Medicine, GS, 2014 Hunter B.D.: Molecular Genetics and Personalized Medicine, Humana Press Inc., 2014 Current scientific and professional publications Course language:

english, slovak

Notes:

Course assessment Total number of assessed students: 9		
Ne	Pr	
0.0	100.0	
<b>Provides:</b> prof. Ing. Mária Mareková, CSc., doc. RNDr. Miroslava Rabajdová, PhD., univerzitná profesorka		
Date of last modification: 17.02.2023		
Approved: prof. MUDr. Ladislav Mirossay, DrSc.		

University: P. J. Šafárik University in Košice Faculty: Faculty of Medicine Course name: Co-solver of a national project (VEGA, KEGA, APVV ...) Course ID: Dek. LF UPJŠ/G-DP/22 Course type, scope and the method: **Course type:** Recommended course-load (hours): Per week: Per study period: Course method: present **Number of ECTS credits: 10** Recommended semester/trimester of the course: Course level: III. **Prerequisities: Conditions for course completion:** Co-solver of a national project (VEGA, KEGA, APVV ...). The doctoral student states the activity in the doctoral annual report and these activities are relevantly documented (e.g. publication, program). **Learning outcomes:** The doctoral student, as a co-investigator, participates in the solution of projects within the team cooperation, he is responsible for partial tasks in the solution of which he participates under the guidance of his supervisor. **Brief outline of the course: Recommended literature:** Course language: english, slovak **Notes:** Course assessment Total number of assessed students: 53 abs neabs 100.0 0.0

Date of last modification: 23.03.2022

**Provides:** 

University: P. J. Šafárik University in Košice Faculty: Faculty of Medicine Course ID: Dek. LF Course name: Co-solver of an international project UPJŠ/G-MP/22 Course type, scope and the method: **Course type:** Recommended course-load (hours): Per week: Per study period: Course method: present **Number of ECTS credits: 15** Recommended semester/trimester of the course: Course level: III. **Prerequisities: Conditions for course completion:** Co-solver of an international project. The doctoral student states the activity in the doctoral annual report and these activities are relevantly documented (e.g. publication, program). **Learning outcomes:** The doctoral student, as a co-investigator, participates in the solution of projects within the team cooperation, he is responsible for partial tasks in the solution of which he participates under the guidance of his supervisor. **Brief outline of the course: Recommended literature:** Course language: english, slovak **Notes:** Course assessment Total number of assessed students: 10 abs neabs 100.0 0.0

**Provides:** 

Date of last modification: 23.03.2022

University: P. J. Šafárik University in Košice Faculty: Faculty of Medicine Course ID: Dek. Course name: Co-solver of internal grant (VVGS) LF UPJŠ/G-UPJS-SR/22 Course type, scope and the method: **Course type: Recommended course-load (hours):** Per week: Per study period: Course method: present **Number of ECTS credits: 3** Recommended semester/trimester of the course: Course level: III. **Prerequisities: Conditions for course completion:** Co-solver of internal grant (VVGS). The doctoral student states the activity in the doctoral annual report and these activities are relevantly documented (e.g. publication, program). **Learning outcomes:** The doctoral student, as a co-investigator, participates in the solution of projects within the team cooperation, he is responsible for partial tasks in the solution of which he participates under the guidance of his supervisor. **Brief outline of the course: Recommended literature:** Course language: english, slovak **Notes:** Course assessment Total number of assessed students: 7 abs neabs 100.0 0.0 **Provides:** Date of last modification: 23.03.2022

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: Dek. LF | Course name: Consultation of ŠVOČ

UPJŠ/V-SVOC/22

Course type, scope and the method:

**Course type:** 

**Recommended course-load (hours):** 

Per week: Per study period: Course method: present

**Number of ECTS credits: 8** 

## Recommended semester/trimester of the course:

Course level: III.

## **Prerequisities:**

## **Conditions for course completion:**

The doctoral student states the activity in the doctoral annual report and these activities are relevantly documented (e.g. publication, program).

The doctoral student states the activity in the doctoral annual report and these activities are relevantly documented (e.g. publication, program).

## **Learning outcomes:**

It concerns professional and consulting work in the management of students, by which the doctoral student demonstrates the ability to use and pass on the acquired scientific knowledge and skills acquired through studies in the relevant field of study / study program.

## **Brief outline of the course:**

## **Recommended literature:**

#### **Course language:**

english, slovak

## **Notes:**

#### Course assessment

Total number of assessed students: 6

abs	neabs
100.0	0.0

## **Provides:**

Date of last modification: 23.03.2022

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: Dek. LF | Co

**Course name:** Defence of Doctoral Thesis

UPJŠ/ODZ/05

Course type, scope and the method:

**Course type:** 

**Recommended course-load (hours):** 

Per week: Per study period: Course method: present

Number of ECTS credits: 20

Recommended semester/trimester of the course:

Course level: III.

**Prerequisities:** 

## **Conditions for course completion:**

All information about the doctoral study is specified on the faculty's website in the Doctoral Study section, including the conditions of completion, which are detailed in the State Examinations section. Students will find here all the necessary information, forms and documents, including information on the formal side of the dissertation, which are in accordance with Directive No. 1/2011 on the basic requirements of final theses and the PhD Study Regulations at UPJŠ in Košice. The submitted work must be in accordance with the Rector's Decision No. 5/2021, issuing the principles of good practice of scientific publication at UPJŠ in Košice and its parts, Rector's Decision No. 21/2021, on issuing rules for the assessment of plagiarism at UPJŠ in Košice and its parts, Rector's Decision No. 2/2022 which issues the principles of good research practice at UPJŠ in Košice and its parts.

## **Learning outcomes:**

The dissertation has the character of a scientific work and the student demonstrates by this work extensive mastery of the theory and professional terminology from the field of study/study program, acquisition of knowledge, skills and competencies in accordance with the declared profile of the graduate, as well as the ability to apply them in an original way. The student demonstrates the ability of independent scientific work in terms of content, formal and ethical, ant the ability to present and critically analyses obtained results.

## **Brief outline of the course:**

#### **Recommended literature:**

## **Course language:**

english, slovak

**Notes:** 

#### Course assessment

Total number of assessed students: 363

N	NNe	NU	NeO	О	Р
0.0	0.0	1.65	0.0	93.39	4.96

Provides:
Date of last modification: 23.03.2022
Approved: prof. MUDr. Ladislav Mirossay, DrSc.

University: P. J. Šafárik University in Košice Faculty: Faculty of Medicine Course ID: Dek. LF Course name: Dissertation examination UPJŠ/DZS/05 Course type, scope and the method: **Course type:** Recommended course-load (hours): Per week: Per study period: Course method: present **Number of ECTS credits: 15** Recommended semester/trimester of the course: Course level: III. **Prerequisities: Conditions for course completion:** The condition for granting the dissertation examination is the completion of the study part in the prescribed composition of subjects and the acquisition of at least 90 credits in the external form, if the study in the four-year form and five-year in the external form. The committee decides on the result of the examination in a non-public meeting by a majority of the members present. In the event of equality of votes, the vote of the President shall prevail. **Learning outcomes: Brief outline of the course: Recommended literature:** Course language: english, slovak **Notes:** Course assessment Total number of assessed students: 588 P 0.17 99.83 **Provides:** Date of last modification: 23.03.2022

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: CJP/ Course name: English Language for PhD Students of Faculty of Medicine

LFAJD/05

Course type, scope and the method:

Course type: Practice

Recommended course-load (hours): Per week: 2 Per study period: 28

Course method: present

Number of ECTS credits: 10

## Recommended semester/trimester of the course:

Course level: III.

## **Prerequisities:**

## **Conditions for course completion:**

completion of e-course English for PhD Students (lms.upjs.sk), consultations (1-3), written assignments - Professional/Academic CV, Short Academic Biography, test, Oral exam

## **Learning outcomes:**

The development of students' language skills - reading, writing, listening, speaking; improvement of their linguistic competence - students acquire knowledge of selected phonological, lexical and syntactic aspects; development of pragmatic competence - students acquire skills for effective and purposeful communication, with focus on Academic English and English for specific/professional purposes, level B2.

## Brief outline of the course:

Specific aspects of academic and professional English with focus on vocabulary development (formality, academic word-list), English grammar (passive voice, nominalisatio), language functions (expressing opinion, cause/effect, presenting arguments, giving examples, describing graphs/charts/schemes, writing Academic CV and short BIO, etc.). Cross-language interference. Academic communication (self-presentation, presenting at scientific meetings and conferences).

## Recommended literature:

Moore, J.: Oxford Academic Vocabulary Practice. OUP, 2017.

Kolaříková, Z., Petruňová, H., Timková, R.: Angličtina v akademickom prostredí (cvičebnica). UPJŠ Košice, 2021.

Tomaščíková, S., Rozenfeld, J. Developing Academic English in Speaking and Writing. Vydavateľstvo ŠafárikPress, 2021.

McCarthy, M., O'Dell, F.: Academic Vocabulary in Use. CUP, 2008.

Štepánek, L., J. De Haff a kol.: Academic English-Akademická angličtina. Grada Publishing, a.s., 2011.

Armer, T.: Cambridge English for Scientists. CUP, 2011.

## Course language:

English language, level B2, C1 according to CEFR

## Notes:

Course assessment Total number of assessed students: 389			
Ne Pr			
0.0 100.0			
Provides: Mgr. Zuzana Kolaříková, PhD.			
Date of last modification: 11.09.2023			
Approved: prof. MUDr. Ladislav Mirossay, DrSc.			

University: P. J. Šafárik University in Košice Faculty: Faculty of Medicine Course ID: Dek. LF Course name: Individual study of scientific literature UPJŠ/ISL/22 Course type, scope and the method: **Course type:** Recommended course-load (hours): Per week: Per study period: Course method: present **Number of ECTS credits: 5** Recommended semester/trimester of the course: Course level: III. **Prerequisities: Conditions for course completion:** The evaluation is carried out by the supervisor based on knowledge of the Ph.D. presented on seminars at the department/clinic. The doctoral student states the activity in the doctoral annual report and these activities are relevantly documented (e.g. publication, program). **Learning outcomes: Brief outline of the course: Recommended literature:** Course language: english, slovak **Notes:** Course assessment Total number of assessed students: 86 abs neabs 100.0 0.0 **Provides:** 

Page: 19

Date of last modification: 23.03.2022

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

**Course ID:** Dek. LF | **Course name:** Internship abroad - more than 30 days

UPJŠ/AZSPn/22

Course type, scope and the method:

**Course type:** 

Recommended course-load (hours):

Per week: Per study period: Course method: present

**Number of ECTS credits: 10** 

Recommended semester/trimester of the course:

Course level: III.

**Prerequisities:** 

**Conditions for course completion:** 

Internship abroad - more than 30 days.

The doctoral student states the activity in the doctoral annual report and these activities are relevantly documented (e.g. publication, program).

**Learning outcomes:** 

Ph.D. student has to present specific results which bring benefits for preparation of dissertation thesis on seminar or an overview of the acquired methodological, professional knowledge.

**Brief outline of the course:** 

**Recommended literature:** 

Course language:

english, slovak

**Notes:** 

Course assessment

Total number of assessed students: 2

abs	neabs
100.0	0.0

**Provides:** 

Date of last modification: 23.03.2022

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: Dek. LF | Course name: Internship abroad - of less than 30 days

UPJŠ/AZSPd/22

Course type, scope and the method:

**Course type:** 

Recommended course-load (hours):

Per week: Per study period: Course method: present

**Number of ECTS credits: 5** 

Recommended semester/trimester of the course:

Course level: III.

**Prerequisities:** 

## **Conditions for course completion:**

Internship abroad - of less than 30 days.

The doctoral student states the activity in the doctoral annual report and these activities are relevantly documented (e.g. publication, program).

## **Learning outcomes:**

Ph.D. student has to present specific results which bring benefits for preparation of dissertation thesis on seminar or an overview of the acquired methodological, professional knowledge.

## **Brief outline of the course:**

#### **Recommended literature:**

## Course language:

english, slovak

**Notes:** 

#### Course assessment

Total number of assessed students: 14

abs	neabs
100.0	0.0

**Provides:** 

Date of last modification: 23.03.2022

University: P. J. Šafárik University in Košice Faculty: Faculty of Medicine Course ID: Dek. LF | Course name: Lecture on research seminar at the department or clinic UPJŠ/P/22 Course type, scope and the method: **Course type:** Recommended course-load (hours): Per week: Per study period: Course method: present **Number of ECTS credits: 2** Recommended semester/trimester of the course: Course level: III. **Prerequisities: Conditions for course completion:** Lecture on research seminar at the department or clinic. The doctoral student states the activity in the doctoral annual report and these activities are relevantly documented (e.g. publication, program). **Learning outcomes:** The doctoral student presents the knowledge gained through individual studies of scientific and professional literature, which he/she can critically evaluate, analyse and subsequently use in his/ her research. **Brief outline of the course: Recommended literature:** Course language: english, slovak **Notes:** Course assessment Total number of assessed students: 33 abs neabs 100.0 0.0 **Provides:** 

Date of last modification: 23.03.2022

University: P. J. Šafárik University in Košice Faculty: Faculty of Medicine Course ID: ULBL/ Course name: Molecular Biology MB/22Course type, scope and the method: Course type: Seminar Recommended course-load (hours): Per week: 2 Per study period: 28 Course method: present Number of ECTS credits: 10 Recommended semester/trimester of the course: Course level: III. **Prerequisities: Conditions for course completion:** oral examination (100%) **Learning outcomes:** To introduce the basic concepts of molecular biology and genetics, including information related to human genome, mutations and gene polymorphism and their role in pharmacodynamics and pharmacokinetics. To give students a thorough grounding in the theoretical and practical foundations of basic genetics. Students have acquired an understanding of the major concepts in human and molecular genetics and have obtainined basic information related to genetic and molecular biology methods in pharmacogenetics and clinical practice. **Brief outline of the course:** Basic concepts of molecular biology Structure of genes and gene expression Human genome, genomic data mining Mutations, gene polymorphisms and their detection Genetics of cancer Molecular biology methods in human genetics and clinical practice Epigenetics **Recommended literature:** 1. Šalagovič, J., Ondruššeková, A., Mičková, H., Klimčáková, L., Židzik, J., Slabá, E., Hudáková, T.: Lekárska biológia I., Equilibria, Košice 2009 2. Mičková, H., Šalagovič, J. a kol.: Lekárska biológia II., Equilibria, Košice 2007 3. Snustad, D. P., Simmons, M. J.: Genetika, Masarykova univerzita, 2017 4. Perlík, F., Slanař, O.: Individualizace farmakoterapie, Triton, 2016 5. Lodish, H. a kol.: Molecular Cell Biology. Macmillan learnings, 2021 Course language: Slovak, English **Notes:** Course assessment Total number of assessed students: 6 Pr Ne 0.0 100.0 **Provides:** prof. RNDr. Ján Šalagovič, PhD.

**Date of last modification:** 24.04.2022

University: P. J. Šafárik University in Košice Faculty: Faculty of Medicine Course ID: Dek. Course name: Obtaining an internal grant UPJŠ (VVGS) or scientific LF UPJŠ/G-UPJSproject for young researchers by Faculty of Medicine - as a responsible ZR/22 solver Course type, scope and the method: **Course type: Recommended course-load (hours):** Per week: Per study period: Course method: present **Number of ECTS credits: 10** Recommended semester/trimester of the course: Course level: III. **Prerequisities: Conditions for course completion:** Obtaining an internal grant UPJŠ (VVGS) or scientific project for young researchers by Faculty of Medicine - as a responsible solver. The doctoral student states the activity in the doctoral annual report and these activities are relevantly documented (e.g. publication, program). Learning outcomes: As a responsible researcher, the doctoral student is able to specify scientific research activities and problems in the medical fields and is able to design scientific projects, including the development of a written proposal. Respects and implements social and ethical aspects in the planning and implementation of scientific research activities. **Brief outline of the course: Recommended literature: Course language:** english, slovak Notes: Course assessment Total number of assessed students: 1 abs neabs 100.0 0.0 **Provides:** 

Date of last modification: 23.03.2022

University: P. J. Šafárik University in Košice Faculty: Faculty of Medicine Course ID: UFR/ Course name: Pharmacology FARM/22 Course type, scope and the method: Course type: Seminar **Recommended course-load (hours):** Per week: 2 Per study period: 28 Course method: present Number of ECTS credits: 10 Recommended semester/trimester of the course: Course level: III. **Prerequisities: Conditions for course completion:** Solving plannedtasks Final exam **Learning outcomes:** To provide students with a comprehensive introduction to the fundamental Pharmacology and uses of the major classes of drugs currently used in medical practice. To master the scientific methods of pharmacology, to be able to apply in a creative way to solve a wide range of problems in the field of human sciences as part of living nature. **Brief outline of the course:** Basic knowledge about the major classes of drugs currently used in medical practice. Detailed knowledge of chemotherapeutics and drugs used in the treatment of cancer due to the scientific-research focus of the institute **Recommended literature:** Mirossay, Mojžiš a kol. Základná farmakológia a farmakoterapia. Druhé vydanie, Equilibria, 2021 Whalen K et al.: Lippincott Illustrated Reviews: Pharmacology 7th edition, 2019 Ritter JM et al.: Rang & Dale's Pharmacology, 2019 Current publications in the field in Slovak or any (mostly English) language Course language: Slovak **English Notes:** Course assessment Total number of assessed students: 6 Ne Pr 100.0 0.0

**Provides:** prof. MUDr. Ladislav Mirossay, DrSc., doc. MVDr. Martina Bago Pilátová, PhD., prof. MVDr. Ján Mojžiš, DrSc., PharmDr. Marek Šarišský, PhD., doc. MUDr. Martina Čižmáriková, PhD., doc. MUDr. Zuzana Solárová, PhD.

Date of last modification: 02.05.2022

University: P. J. Šafá	rik University in Košice	
Faculty: Faculty of N	Medicine	
Course ID: Dek. LF UPJŠ/PDS/16	Course name: Preparation	of the thesis for dissertation examination
Course type, scope a Course type: Recommended cou Per week: Per stud Course method: pre	rse-load (hours): ly period:	
Number of ECTS cr	edits: 5	
Recommended seme	ester/trimester of the cours	e:
Course level: III.		
Prerequisities:		
submits the application from the beginning of external form at the is obliged to submit, prepared for the dissert All information about section, including the section. Students with information on the formation on the formation on the submitted work principles of good procession No. 21/202	mination is a state examination for the dissertation examinated of the study, depending on the latest within three years frow together with the application examination. It the doctoral study is specificate conditions of completional find here all the necessary formal side of the dissertation equirements of final theses a must be in accordance with practice of scientific publication No. 2/2022 which issues	on and is public. The PhD student ination through AiS2 in the time up to 24 months he standard length of studies, the PhD student in om the beginning of the studies, the PhD student in for the dissertation examination, a written work fied on the faculty's website in the Doctoral Study in, which are detailed in the State Examinations ry information, forms and documents, including on, which are in accordance with Directive No. and the PhD Study Regulations at UPJŠ in Košice. The Rector's Decision No. 5/2021, issuing the ation at UPJŠ in Košice and its parts, Rector's seessment of plagiarism at UPJŠ in Košice and its of the principles of good research practice at UPJŠ
Learning outcomes:		
Brief outline of the c	-	
Recommended literature:		
Course language: english, slovak		
Notes:		
Course assessment Total number of asse	ssed students: 92	
	abs	neabs
	100.0	0.0

Provides:	
Date of last modification: 23.03.2022	
Approved: prof. MUDr. Ladislav Mirossay, DrSc.	

University: P. J. Šafárik University in Košice Faculty: Faculty of Medicine Course ID: Dek. LF **Course name:** Prevention and treatment activities (per semester) UPJŠ/LPC/22 Course type, scope and the method: **Course type:** Recommended course-load (hours): Per week: Per study period: Course method: present **Number of ECTS credits: 10** Recommended semester/trimester of the course: Course level: III. **Prerequisities: Conditions for course completion:** Performing medical-preventive activities at the Faculty of Medicine (per semester). The doctoral student states the activity in the doctoral annual report and these activities are relevantly documented (e.g. publication, program). **Learning outcomes:** Doctoral students involved in the treatment and prevention of patients in a hospital or outpatient clinic transfer and integrate knowledge from their own field of study / study program into work with patients. **Brief outline of the course: Recommended literature:** Course language: english, slovak **Notes:** Course assessment Total number of assessed students: 82 abs neabs 100.0 0.0 **Provides:** Date of last modification: 23.03.2022

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: Course name: Research Methodology and Statistics

UPZMV/MVaS/22

Course type, scope and the method: Course type: Lecture / Seminar Recommended course-load (hours): Per week: 1/2 Per study period: 14/28

Course method: present

**Number of ECTS credits: 10** 

## Recommended semester/trimester of the course:

Course level: III.

## **Prerequisities:**

## **Conditions for course completion:**

- 1. Online test after each lecture
- 2. Problem learning after each block of lectures

## **Learning outcomes:**

Introduction to basic methods of epidemiological and clinical studies and mastering their application in biomedical research. Gaining theoretical knowledge in biomedical statistics and improving their practical use.

## **Brief outline of the course:**

First block of lectures / problem learning PU1: research protocol

- 1. Guide to the course
- 2. Research process
- 3. Measurement of impact
- 4. Study design
- 5. Validity of the study
- 6. Questionnaire methods

Second block of lectures / problem learning PU2: working with statistical software

- 7. Random variable
- 8. Hypothesis, testing
- 9. Introduction to work with statistical software
- 10. Univariate statistical methods I
- 11. Univariate statistical methods II

Third block of lectures / problem learning PU3: statistical data analysis

- 12. Linear regression
- 13. Logistic regression
- 14. Mutual influences of variables, interaction
- 16. Randomized controlled trials implementation
- 17. Randomized controlled trials analyzes
- 18. Sensitivity and specificity

## **Recommended literature:**

Achengrau A., Seage G.R.: Essentials of epidemiology in public health. Jones and Bartlet Publishers. 2008

Thompson, B. (2006). Foundations of behavioral statistics. New York, NY: Guilford Press.

Kerlinger F.N.: Základy výzkumu chováni Academia 1972

Claus , Ebner: Základy štatistiky pre psychológov, pedagógov a sociológov. Bratislava : SPN, 1988.

## Course language:

slovak, english

## **Notes:**

combined form of education

## **Course assessment**

Total number of assessed students: 116

Ne	Pr
11.21	88.79

**Provides:** doc. Mgr. Zuzana Dankulincová, PhD., Mgr. Peter Kolarčik, PhD., prof. Mgr. Andrea Madarasová Gecková, PhD., MUDr. Jaroslav Rosenberger, PhD., doc. RNDr. Daniel Klein, PhD., Mgr. Aurel Zelko, PhD.

Date of last modification: 13.05.2022

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: Dek. LF | Course name: Responses to the scientific work in which the doctoral

UPJŠ/O-S-ZC/22 | student is as a co-author - registered in a foreign scientific journal

Course type, scope and the method:

**Course type:** 

Recommended course-load (hours):

Per week: Per study period: Course method: present

**Number of ECTS credits: 5** 

## Recommended semester/trimester of the course:

Course level: III.

## **Prerequisities:**

## **Conditions for course completion:**

Responses to the scientific work in which the doctoral student is as a co-author - registered in a national scientific journal.

The doctoral student states the activity in the doctoral annual report and these activities are relevantly documented (e.g. publication, program).

## **Learning outcomes:**

Gaining feedback in foreign journals demonstrates a broad and well-founded scientific knowledge at the international level in the field of research.

#### **Brief outline of the course:**

#### **Recommended literature:**

## Course language:

english, slovak

## **Notes:**

#### Course assessment

Total number of assessed students: 1

abs	neabs
100.0	0.0

#### **Provides:**

Date of last modification: 23.03.2022

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: Dek. LF **Course name:** Responses to the scientific work in which the doctoral student is as a co-author - registered in a national scientific journal

UPJŠ/O-S-DC/22

Course type, scope and the method:

**Course type:** 

Recommended course-load (hours):

Per week: Per study period: Course method: present

**Number of ECTS credits: 3** 

## Recommended semester/trimester of the course:

Course level: III.

## **Prerequisities:**

## **Conditions for course completion:**

Responses to the scientific work in which the doctoral student is as a co-author - registered in a national scientific journal.

The doctoral student states the activity in the doctoral annual report and these activities are relevantly documented (e.g. publication, program).

## **Learning outcomes:**

Gaining feedback in domestic journals demonstrates well-founded and accepted scientific knowledge at the national level in the field of research.

## **Brief outline of the course:**

#### **Recommended literature:**

## Course language:

english, slovak

## **Notes:**

#### Course assessment

Total number of assessed students: 0

abs	neabs
0.0	0.0

#### **Provides:**

Date of last modification: 23.03.2022

University: P. J. Šafárik University in Košice Faculty: Faculty of Medicine Course ID: Dek. **Course name:** Responses to the scientific work in which the doctoral LF UPJŠ/O-S-SCI/ student is as a co-author - registered in databases SCI or Scopus Scopus/22 Course type, scope and the method: **Course type: Recommended course-load (hours):** Per week: Per study period: Course method: present **Number of ECTS credits: 10** Recommended semester/trimester of the course: Course level: III. **Prerequisities: Conditions for course completion:** Responses to the scientific work in which the doctoral student is as a co-author - registered in databases SCI or Scopus. The doctoral student states the activity in the doctoral annual report and these activities are relevantly documented (e.g. publication, program). Learning outcomes: Gaining SCI/Scopus feedback demonstrates broad and well-founded scientific knowledge in the field. At the same time, citation in an indexed source demonstrates the competence to communicate new knowledge at the highest expert level and points to the international importance of the cited research. **Brief outline of the course: Recommended literature: Course language:** english, slovak Notes: Course assessment Total number of assessed students: 10 abs neabs 100.0 0.0 **Provides:** 

Date of last modification: 23.03.2022

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: Dek. LF | Course name: Responses to the scientific work in which the doctoral

UPJŠ/O-1.-ZC/22 | student is as the 1st author - registered in a foreign scientific journal

Course type, scope and the method:

**Course type:** 

Recommended course-load (hours):

Per week: Per study period: Course method: present

**Number of ECTS credits: 10** 

Recommended semester/trimester of the course:

Course level: III.

**Prerequisities:** 

## **Conditions for course completion:**

Responses to the scientific work in which the doctoral student is as the 1st author - registered in a foreign scientific journal.

The doctoral student states the activity in the doctoral annual report and these activities are relevantly documented (e.g. publication, program).

## **Learning outcomes:**

Gaining feedback in foreign journals demonstrates a broad and well-founded scientific knowledge at the international level in the field of research.

#### **Brief outline of the course:**

#### **Recommended literature:**

## Course language:

english, slovak

**Notes:** 

#### Course assessment

Total number of assessed students: 6

abs	neabs
100.0	0.0

**Provides:** 

Date of last modification: 23.03.2022

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: Dek. LF | Course name: Responses to the scientific work in which the doctoral

UPJŠ/O-1.-DC/22 | student is as the 1st author - registered in a national scientific journal

Course type, scope and the method:

**Course type:** 

Recommended course-load (hours):

Per week: Per study period: Course method: present

**Number of ECTS credits: 5** 

Recommended semester/trimester of the course:

Course level: III.

**Prerequisities:** 

## **Conditions for course completion:**

Responses to the scientific work in which the doctoral student is as the 1st author - registered in a national scientific journal.

The doctoral student states the activity in the doctoral annual report and these activities are relevantly documented (e.g. publication, program).

## **Learning outcomes:**

Gaining feedback in domestic journals demonstrates well-founded and accepted scientific knowledge at the national level in the field of research.

## **Brief outline of the course:**

#### **Recommended literature:**

## **Course language:**

english, slovak

**Notes:** 

**Course assessment** 

Total number of assessed students: 0

abs	neabs
0.0	0.0

**Provides:** 

Date of last modification: 23.03.2022

University: P. J. Šafárik University in Košice Faculty: Faculty of Medicine Course ID: Dek. **Course name:** Responses to the scientific work in which the doctoral LF UPJŠ/O-1.-SCI/ student is as the 1st author - registered in databases SCI or Scopus Scopus/22 Course type, scope and the method: **Course type: Recommended course-load (hours):** Per week: Per study period: Course method: present **Number of ECTS credits: 20** Recommended semester/trimester of the course: Course level: III. **Prerequisities: Conditions for course completion:** Responses to the scientific work in which the doctoral student is as the 1st author - registered in databases SCI or Scopus. The doctoral student states the activity in the doctoral annual report and these activities are relevantly documented (e.g. publication, program). Learning outcomes: Gaining SCI/Scopus feedback demonstrates broad and well-founded scientific knowledge in the field. At the same time, citation in an indexed source demonstrates the competence to communicate new knowledge at the highest expert level and points to the international importance of the cited research. **Brief outline of the course: Recommended literature: Course language:** english, slovak Notes: Course assessment Total number of assessed students: 15 abs neabs 100.0 0.0 **Provides:** 

Date of last modification: 23.03.2022

University: P. J. Šafárik University in Košice Faculty: Faculty of Medicine Course ID: Dek. LF Course name: Review of bachelor thesis UPJŠ/OP-ZP/22 Course type, scope and the method: **Course type:** Recommended course-load (hours): Per week: Per study period: Course method: present **Number of ECTS credits: 3** Recommended semester/trimester of the course: Course level: III. **Prerequisities: Conditions for course completion:** Review of bachelor thesis. The doctoral student states the activity in the doctoral annual report and these activities are relevantly documented (e.g. publication, program). **Learning outcomes:** By elaborating the report, the doctoral student demonstrates the ability to use scientific knowledge and experience from scientific research activities in the relevant field of study/study program. It declares the competence that professional problem and its proposal solutions to critically assess, evaluate, or propose other solutions. **Brief outline of the course:** Recommended literature: **Course language:** english, slovak **Notes:** Course assessment

Total number of assessed students: 5

abs	neabs
100.0	0.0

**Provides:** 

Date of last modification: 24.03.2022

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: Course name: Scientific communication and research projects management

UPZMV/ VKMVP/22

Course type, scope and the method: Course type: Lecture / Seminar

Recommended course-load (hours): Per week: 1 / 1 Per study period: 14 / 14

Course method: present

**Number of ECTS credits:** 5

#### **Recommended semester/trimester of the course:**

Course level: III.

## **Prerequisities:**

## **Conditions for course completion:**

It is awarded on the basis of taking into account recorded lectures and solving assigned tasks in problem-based learning.

## **Learning outcomes:**

Get acquainted with the principles of scientific communication and develop the skills of scientific work.

## **Brief outline of the course:**

- Research projects, their preparation and management.
- Logistics of field data collection.
- Legal aspects of medical research.
- Ethical aspects of research studies. Ethics Committee Financial and administrative management research projects.
- Literature search, work with literary databases, literary review.
- Structure of scientific work. Publishing process, communication with scientific journals.
- Presentation of scientific results (poster, lecture, press release).
- Review of scientific work.

#### Recommended literature:

- 1. International Committee of Medical Journal Editors: Uniform Requirements for Manuscripts Submitted to Biomedical Journals: Writing and Editing for Biomedical Publication. April 2010, www.icmje.org
- 2. Jacinto T, et al. How to write a scientific paper Searching and Managing Biomedical information. Rev Port Pneumol. 2011. doi:10.1016/j.rppneu.2011.05.005
- 3. Bahna SL, McLarty JW. Data presentation. Ann Allergy Asthma Immunol. 2009 Oct;103(4 Suppl 1):S15-21
- 4. Azevedo LF et al: How write a scientific paper Writing the methods section. Revista portuguesa de pneumologia 08/2011; DOI: 10.1016/j.rppneu.2011.06.014

#### Course language:

Slovak, English

# Notes: hybrid form Course assessment Total number of assessed students: 18 Ne Pr 0.0 100.0

**Provides:** doc. Mgr. Zuzana Dankulincová, PhD., prof. Mgr. Andrea Madarasová Gecková, PhD., Ing. Lucia Bosáková, PhD., univerzitný docent, PhDr. Ivana Mészáros Skoumalová, PhD., Mgr. Daniela Fil'akovská, PhD., Mgr. Daniela Husárová, PhD., Mgr. Peter Kolarčik, PhD., Mgr. Jaroslava Kopčáková, PhD.

Date of last modification: 16.05.2022

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: Dek. LF
UPJŠ/VP-MONOIV/22

Course name: Scientific work as a monograph, published in another publisher

Course type, scope and the method:

**Course type:** 

Recommended course-load (hours):

Per week: Per study period: Course method: present

**Number of ECTS credits: 20** 

Recommended semester/trimester of the course:

Course level: III.

## **Prerequisities:**

## **Conditions for course completion:**

Scientific work as a monograph, published in another publisher.

The doctoral student states the activity in the doctoral annual report and these activities are relevantly documented (e.g. publication, program).

## **Learning outcomes:**

By publishing a monograph, the doctoral student demonstrates a high degree of ability to identify, evaluate, correctly apply scientific knowledge and research methods. The doctoral student demonstrates the competence to use existing theories and concepts in an innovative way, as well as to generate new original scientific knowledge, which he publishes in the monograph (usually in a foreign language) in accordance with the set quality and ethical standards.

#### **Brief outline of the course:**

## **Recommended literature:**

#### **Course language:**

english, slovak

#### Notes:

## Course assessment

Total number of assessed students: 4

abs	neabs
100.0	0.0

#### **Provides:**

Date of last modification: 23.03.2022

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

**Course ID:** Dek. LF | **Course name:** Scientific work as a monograph, published in • publishers

UPJŠ/VP-MONO/22 | Elsevier, Springer, WileyBlackwell or Taylor & Francis

Course type, scope and the method:

**Course type:** 

**Recommended course-load (hours):** 

Per week: Per study period: Course method: present

**Number of ECTS credits: 40** 

Recommended semester/trimester of the course:

Course level: III.

## **Prerequisities:**

#### **Conditions for course completion:**

Scientific work as a monograph, published in publishers Elsevier, Springer, WileyBlackwell or Taylor & Francis.

The doctoral student states the activity in the doctoral annual report and these activities are relevantly documented (e.g. publication, program).

## **Learning outcomes:**

By publishing a monograph, the doctoral student demonstrates a high degree of ability to identify, evaluate, correctly apply scientific knowledge and research methods. The doctoral student demonstrates the competence to use existing theories and concepts in an innovative way, as well as to generate new original scientific knowledge, which he publishes in the monograph (usually in a foreign language) in accordance with the set quality and ethical standards.

#### **Brief outline of the course:**

#### **Recommended literature:**

#### **Course language:**

english, slovak

#### Notes:

## **Course assessment**

Total number of assessed students: 0

abs	neabs
0.0	0.0

#### **Provides:**

Date of last modification: 23.03.2022

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: Dek. LF | Course name: Scientific work published in a foreign journal as a co-author

UPJŠ/VP-ZC-S/22

Course type, scope and the method:

**Course type:** 

**Recommended course-load (hours):** 

Per week: Per study period: Course method: present

**Number of ECTS credits: 10** 

Recommended semester/trimester of the course:

Course level: III.

**Prerequisities:** 

## **Conditions for course completion:**

Scientific work published in a foreign journal as a co-author.

The doctoral student states the activity in the doctoral annual report and these activities are relevantly documented (e.g. publication, program).

## **Learning outcomes:**

By publishing a scientific paper in a foreign journal, the doctoral student demonstrates a high degree of ability to identify, evaluate, and correctly apply scientific knowledge and research methods. Demonstrates competence in innovative ways to use existing theories and concepts, as well as the ability to generate new original scientific knowledge, which he publishes in foreign peer-reviewed (usually in a foreign language) by adhering to established quality and ethical standards.

#### **Brief outline of the course:**

#### **Recommended literature:**

## Course language:

english, slovak

**Notes:** 

#### Course assessment

Total number of assessed students: 15

abs	neabs
100.0	0.0

**Provides:** 

Date of last modification: 23.03.2022

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: Dek. LF | Course name: Scientific work published in a foreign journal as the 1st

UPJŠ/VP-ZC-1./22 author

Course type, scope and the method:

**Course type:** 

Recommended course-load (hours):

Per week: Per study period: Course method: present

**Number of ECTS credits: 15** 

Recommended semester/trimester of the course:

Course level: III.

**Prerequisities:** 

#### **Conditions for course completion:**

Scientific work published in a foreign journal as the 1st author.

The doctoral student states the activity in the doctoral annual report and these activities are relevantly documented (e.g. publication, program).

## **Learning outcomes:**

By publishing a scientific paper in a foreign journal, the doctoral student demonstrates a high degree of ability to identify, evaluate, and correctly apply scientific knowledge and research methods. Demonstrates competence in innovative ways to use existing theories and concepts, as well as the ability to generate new original scientific knowledge, which he publishes in foreign peer-reviewed (usually in a foreign language) by adhering to established quality and ethical standards.

#### **Brief outline of the course:**

#### **Recommended literature:**

## Course language:

english, slovak

**Notes:** 

#### Course assessment

Total number of assessed students: 6

abs	neabs
100.0	0.0

**Provides:** 

Date of last modification: 23.03.2022

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: Dek. LF Co

Course name: Scientific work published in an unreviewed foreign or

UPJŠ/VP-NC-S/22

national proceeding as a co-author

Course type, scope and the method:

**Course type:** 

Recommended course-load (hours):

Per week: Per study period: Course method: present

**Number of ECTS credits: 3** 

Recommended semester/trimester of the course:

Course level: III.

**Prerequisities:** 

## **Conditions for course completion:**

Scientific work published in an unreviewed foreign or national proceedingm PhD. student - a co-author.

The doctoral student states the activity in the doctoral annual report and these activities are relevantly documented (e.g. publication, program).

## **Learning outcomes:**

By publishing a scientific paper in a non-peer-reviewed foreign or domestic proceedings, the doctoral student demonstrates the ability to identify, evaluate and apply scientific knowledge. Demonstrates competence to use existing theories and concepts, as well as the ability to generate new knowledge, which he publishes in domestic or foreign non-peer-reviewed proceedings by adhering to established quality and ethical standards.

#### **Brief outline of the course:**

## **Recommended literature:**

#### **Course language:**

english, slovak

Notes:

## Course assessment

Total number of assessed students: 7

abs	neabs
100.0	0.0

**Provides:** 

Date of last modification: 23.03.2022

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: Dek. LF

Course name: Scientific work published in an unreviewed foreign or

UPJŠ/VP-NC-1./22

national proceeding as the 1st author

Course type, scope and the method:

**Course type:** 

Recommended course-load (hours):

Per week: Per study period: Course method: present

**Number of ECTS credits: 6** 

Recommended semester/trimester of the course:

Course level: III.

**Prerequisities:** 

## **Conditions for course completion:**

Scientific work published in an unreviewed foreign or national proceedingm PhD. student - the 1st author.

The doctoral student states the activity in the doctoral annual report and these activities are relevantly documented (e.g. publication, program).

## **Learning outcomes:**

By publishing a scientific paper in a non-peer-reviewed foreign or domestic proceedings, the doctoral student demonstrates the ability to identify, evaluate and apply scientific knowledge. Demonstrates competence to use existing theories and concepts, as well as the ability to generate new knowledge, which he publishes in domestic or foreign non-peer-reviewed proceedings by adhering to established quality and ethical standards.

#### **Brief outline of the course:**

#### **Recommended literature:**

#### **Course language:**

english, slovak

Notes:

## **Course assessment**

Total number of assessed students: 5

abs	neabs
100.0	0.0

**Provides:** 

Date of last modification: 23.03.2022

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: Dek. LF UPJŠ/VP-DC-S/22

**Course name:** Scientific work published in in a national magazine, respective in in a peer-reviewed foreign or national proceeding as a coauthor

Course type, scope and the method:

**Course type:** 

Recommended course-load (hours):

Per week: Per study period: Course method: present

**Number of ECTS credits: 5** 

**Recommended semester/trimester of the course:** 

Course level: III.

## **Prerequisities:**

# **Conditions for course completion:**

Scientific work published in in a national magazine, respective in in a peer-reviewed foreign or national proceeding as a co-author.

The doctoral student states the activity in the doctoral annual report and these activities are relevantly documented (e.g. publication, program).

## Learning outcomes:

By publishing a scientific paper in a domestic journal or in a peer-reviewed foreign or domestic proceedings, the doctoral student demonstrates the ability to identify, evaluate, and correctly apply scientific knowledge and research methods. Demonstrates competence to use existing theories and concepts, as well as the ability to generate scientific knowledge, which he publishes in domestic peer-reviewed journals or domestic or foreign peer-reviewed proceedings (usually in a foreign language) by adhering to established quality and ethical standards.

#### **Brief outline of the course:**

#### Recommended literature:

## Course language:

english, slovak

#### Notes:

#### Course assessment

Total number of assessed students: 43

abs	neabs
100.0	0.0

#### **Provides:**

Date of last modification: 23.03.2022

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: Dek. LF UPJŠ/VP-DC-1 /22

**Course name:** Scientific work published in in a national magazine, respective in in a peer-reviewed foreign or national proceeding as the 1st author

Course type, scope and the method:

**Course type:** 

**Recommended course-load (hours):** 

Per week: Per study period: Course method: present

**Number of ECTS credits: 10** 

Recommended semester/trimester of the course:

Course level: III.

## **Prerequisities:**

# **Conditions for course completion:**

Scientific work published in in a national magazine, respective in in a peer-reviewed foreign or national proceeding as the 1st author.

The doctoral student states the activity in the doctoral annual report and these activities are relevantly documented (e.g. publication, program).

## Learning outcomes:

By publishing a scientific paper in a domestic journal or in a peer-reviewed foreign or domestic proceedings, the doctoral student demonstrates the ability to identify, evaluate, and correctly apply scientific knowledge and research methods. Demonstrates competence to use existing theories and concepts, as well as the ability to generate scientific knowledge, which he publishes in domestic peer-reviewed journals or domestic or foreign peer-reviewed proceedings (usually in a foreign language) by adhering to established quality and ethical standards.

#### **Brief outline of the course:**

#### **Recommended literature:**

## Course language:

english, slovak

#### Notes:

#### Course assessment

Total number of assessed students: 32

abs	neabs
100.0	0.0

#### **Provides:**

Date of last modification: 23.03.2022

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: Dek. LF UPJŠ/VP-S-O1/22

**Course name:** Scientific work published in the journal registered in the WoS/Scopusus databases - as a co-author in the journal which is included in category Q1

Course type, scope and the method:

**Course type:** 

Recommended course-load (hours):

Per week: Per study period: Course method: present

**Number of ECTS credits: 30** 

Recommended semester/trimester of the course:

Course level: III.

## **Prerequisities:**

## **Conditions for course completion:**

PhD. student - co-author in the journal which is included in category Q1 (according SJR or JCR). The doctoral student states the activity in the doctoral annual report and these activities are relevantly documented (e.g. publication, program).

## **Learning outcomes:**

By publishing a scientific work in journals registered in reputable databases (WoS, Scopus), the doctoral student demonstrates a high degree of ability to identify, evaluate, correct apply the scientific knowledge and use research methodology. Ph.D. student demonstrates competence to use existing theories and concepts in an innovative way, as well as the ability to generate new original scientific knowledge, which he/she publishes in renowned journals (usually in a foreign language) by adhering to established quality and ethical standards.

## **Brief outline of the course:**

#### **Recommended literature:**

#### Course language:

english, slovak

## **Notes:**

#### Course assessment

Total number of assessed students: 9

abs	neabs
100.0	0.0

## **Provides:**

Date of last modification: 23.03.2022

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: Dek. LF UPJŠ/VP-S-O2/22

**Course name:** Scientific work published in the journal registered in the WoS/Scopusus databases - as a co-author in the journal which is included in category Q2

Course type, scope and the method:

**Course type:** 

Recommended course-load (hours):

Per week: Per study period: Course method: present

**Number of ECTS credits: 20** 

Recommended semester/trimester of the course:

Course level: III.

## **Prerequisities:**

## **Conditions for course completion:**

PhD. student - co-author in the journal which is included in category Q2 (according SJR or JCR). The doctoral student states the activity in the doctoral annual report and these activities are relevantly documented (e.g. publication, program).

## **Learning outcomes:**

By publishing a scientific work in journals registered in reputable databases (WoS, Scopus), the doctoral student demonstrates a high degree of ability to identify, evaluate, correct apply the scientific knowledge and use research methodology. Ph.D. student demonstrates competence to use existing theories and concepts in an innovative way, as well as the ability to generate new original scientific knowledge, which he/she publishes in renowned journals (usually in a foreign language) by adhering to established quality and ethical standards.

## **Brief outline of the course:**

#### **Recommended literature:**

#### Course language:

english, slovak

## **Notes:**

#### Course assessment

Total number of assessed students: 10

abs	neabs
100.0	0.0

## **Provides:**

Date of last modification: 23.03.2022

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: Dek. LF UPJŠ/VP-S-O3/22

**Course name:** Scientific work published in the journal registered in the WoS/Scopusus databases - as a co-author in the journal which is included in category Q3

Course type, scope and the method:

**Course type:** 

Recommended course-load (hours):

Per week: Per study period: Course method: present

**Number of ECTS credits: 15** 

Recommended semester/trimester of the course:

Course level: III.

## **Prerequisities:**

## **Conditions for course completion:**

PhD. student - co-author in the journal which is included in category Q3 (according SJR or JCR). The doctoral student states the activity in the doctoral annual report and these activities are relevantly documented (e.g. publication, program).

## **Learning outcomes:**

By publishing a scientific work in journals registered in reputable databases (WoS, Scopus), the doctoral student demonstrates a high degree of ability to identify, evaluate, correct apply the scientific knowledge and use research methodology. Ph.D. student demonstrates competence to use existing theories and concepts in an innovative way, as well as the ability to generate new original scientific knowledge, which he/she publishes in renowned journals (usually in a foreign language) by adhering to established quality and ethical standards.

## **Brief outline of the course:**

#### **Recommended literature:**

#### **Course language:**

english, slovak

## **Notes:**

#### Course assessment

Total number of assessed students: 9

abs	neabs
100.0	0.0

## **Provides:**

Date of last modification: 23.03.2022

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: Dek. LF UPJŠ/VP-S-O4/22

**Course name:** Scientific work published in the journal registered in the WoS/Scopusus databases - as a co-author in the journal which is included in

category Q4

Course type, scope and the method:

**Course type:** 

Recommended course-load (hours):

Per week: Per study period: Course method: present

**Number of ECTS credits: 10** 

Recommended semester/trimester of the course:

Course level: III.

## **Prerequisities:**

## **Conditions for course completion:**

PhD. student - co-author in the journal which is included in category Q4 (according SJR or JCR). The doctoral student states the activity in the doctoral annual report and these activities are relevantly documented (e.g. publication, program).

## **Learning outcomes:**

By publishing a scientific work in journals registered in reputable databases (WoS, Scopus), the doctoral student demonstrates a high degree of ability to identify, evaluate, correct apply the scientific knowledge and use research methodology. Ph.D. student demonstrates competence to use existing theories and concepts in an innovative way, as well as the ability to generate new original scientific knowledge, which he/she publishes in renowned journals (usually in a foreign language) by adhering to established quality and ethical standards.

## **Brief outline of the course:**

#### **Recommended literature:**

#### Course language:

english, slovak

## **Notes:**

#### Course assessment

Total number of assessed students: 2

abs	neabs
100.0	0.0

## **Provides:**

Date of last modification: 23.03.2022

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: Dek. LF UPJŠ/VP-1.-Q1/22

**Course name:** Scientific work published in the journal registered in the WoS/Scopusus databases - as the 1st author in the journal which is included in category Q1

in category Q1

Course type, scope and the method:

**Course type:** 

**Recommended course-load (hours):** 

Per week: Per study period: Course method: present

**Number of ECTS credits: 40** 

Recommended semester/trimester of the course:

Course level: III.

## **Prerequisities:**

## **Conditions for course completion:**

PhD. student - 1st author in the journal which is included in category Q1 (according SJR or JCR). The doctoral student states the activity in the doctoral annual report and these activities are relevantly documented (e.g. publication, program).

## **Learning outcomes:**

By publishing a scientific work in journals registered in reputable databases (WoS, Scopus), the doctoral student demonstrates a high degree of ability to identify, evaluate, correct apply the scientific knowledge and use research methodology. Ph.D. student demonstrates competence to use existing theories and concepts in an innovative way, as well as the ability to generate new original scientific knowledge, which he/she publishes in renowned journals (usually in a foreign language) by adhering to established quality and ethical standards.

## **Brief outline of the course:**

#### **Recommended literature:**

#### Course language:

english, slovak

## **Notes:**

#### Course assessment

Total number of assessed students: 10

abs	neabs
100.0	0.0

## **Provides:**

Date of last modification: 23.03.2022

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: Dek. LF UPJŠ/VP-1.-Q2/22

**Course name:** Scientific work published in the journal registered in the WoS/Scopusus databases - as the 1st author in the journal which is included in category Q2

Course type, scope and the method:

**Course type:** 

Recommended course-load (hours):

Per week: Per study period: Course method: present

**Number of ECTS credits: 30** 

Recommended semester/trimester of the course:

Course level: III.

## **Prerequisities:**

## **Conditions for course completion:**

PhD. student - 1st author in the journal which is included in category Q2 (according SJR or JCR). The doctoral student states the activity in the doctoral annual report and these activities are relevantly documented (e.g. publication, program).

## **Learning outcomes:**

By publishing a scientific work in journals registered in reputable databases (WoS, Scopus), the doctoral student demonstrates a high degree of ability to identify, evaluate, correct apply the scientific knowledge and use research methodology. Ph.D. student demonstrates competence to use existing theories and concepts in an innovative way, as well as the ability to generate new original scientific knowledge, which he/she publishes in renowned journals (usually in a foreign language) by adhering to established quality and ethical standards.

## **Brief outline of the course:**

#### **Recommended literature:**

#### Course language:

english, slovak

## **Notes:**

#### Course assessment

Total number of assessed students: 1

abs	neabs
100.0	0.0

## **Provides:**

Date of last modification: 23.03.2022

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: Dek. LF UPJŠ/VP-1.-O3/22

**Course name:** Scientific work published in the journal registered in the WoS/Scopusus databases - as the 1st author in the journal which is included in category Q3

Course type, scope and the method:

**Course type:** 

**Recommended course-load (hours):** 

Per week: Per study period: Course method: present

**Number of ECTS credits: 25** 

Recommended semester/trimester of the course:

Course level: III.

## **Prerequisities:**

## **Conditions for course completion:**

PhD. student - 1st author in the journal which is included in category Q3 (according SJR or JCR). The doctoral student states the activity in the doctoral annual report and these activities are relevantly documented (e.g. publication, program).

## **Learning outcomes:**

By publishing a scientific work in journals registered in reputable databases (WoS, Scopus), the doctoral student demonstrates a high degree of ability to identify, evaluate, correct apply the scientific knowledge and use research methodology. Ph.D. student demonstrates competence to use existing theories and concepts in an innovative way, as well as the ability to generate new original scientific knowledge, which he/she publishes in renowned journals (usually in a foreign language) by adhering to established quality and ethical standards.

## **Brief outline of the course:**

#### **Recommended literature:**

#### Course language:

english, slovak

## **Notes:**

#### Course assessment

Total number of assessed students: 1

abs	neabs
100.0	0.0

## **Provides:**

Date of last modification: 23.03.2022

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

**Course ID:** Dek. LF UPJŠ/VP-1.-Q4/22 Course name: Scientific work published in the journal registered in the WoS/Scopusus databases - as the 1st author in the journal which is included in category Q4

Course type, scope and the method:

**Course type:** 

Recommended course-load (hours):

Per week: Per study period: Course method: present

**Number of ECTS credits: 10** 

Recommended semester/trimester of the course:

Course level: III.

## **Prerequisities:**

## **Conditions for course completion:**

PhD. student - 1st author in the journal which is included in category Q4 (according SJR or JCR). The doctoral student states the activity in the doctoral annual report and these activities are relevantly documented (e.g. publication, program).

## **Learning outcomes:**

By publishing a scientific work in journals registered in reputable databases (WoS, Scopus), the doctoral student demonstrates a high degree of ability to identify, evaluate, correct apply the scientific knowledge and use research methodology. Ph.D. student demonstrates competence to use existing theories and concepts in an innovative way, as well as the ability to generate new original scientific knowledge, which he/she publishes in renowned journals (usually in a foreign language) by adhering to established quality and ethical standards.

## **Brief outline of the course:**

#### **Recommended literature:**

#### Course language:

english, slovak

## **Notes:**

#### Course assessment

Total number of assessed students: 0

abs	neabs
0.0	0.0

## **Provides:**

Date of last modification: 23.03.2022

University: P. J. Šafárik University in Košice Faculty: Faculty of Medicine Course ID: ULI/ Course name: Statistical methods in scientific work SMVP/22 Course type, scope and the method: Course type: Seminar Recommended course-load (hours): Per week: 2 Per study period: 28 Course method: present **Number of ECTS credits: 5** Recommended semester/trimester of the course: Course level: III. **Prerequisities: Conditions for course completion:** interview, exam **Learning outcomes:** Get an adequate overview of statistical methods in biology and acquire the ability to choose the most appropriate one. A specific application in use in one's own work. **Brief outline of the course:** • Statistical methods in biology • Epidemiological studies - statistics • Statistical verification of working hypotheses • Statistical evaluation of clinical files **Recommended literature:** 1. Majerník J. Základy (bio)štatistiky pre medikov, Univerzita Pavla Jozefa Šafárika v Košiciach, ŠafárikPress, 2021, ISBN 978-80-574-0066-0. 2. Riečan B., Lamoš F., Lenárt C.: Pravdepodobnosť a štatistika, 1992. 3. Anděl, J.: Matematická štatistika, SNTL, Alfa, Praha, 1985. 4. Rimarčík M.: Základy štatistiky, 2006. Course language: Slovak, English **Notes:** Course assessment Total number of assessed students: 4 Ne Pr 0.0 100.0 Provides: doc. Ing. Jaroslav Majerník, PhD.

Date of last modification: 25.03.2023

University: P. J. Šafárik University in Košice		
Faculty: Faculty of Medicine		
Course ID: Dek. LF UPJŠ/ODP/16	Course name: Submission	of dissertation thesis for defense
Course type, scope and the method: Course type: Recommended course-load (hours): Per week: Per study period: Course method: present		
Number of ECTS cr	edits: 10	
Recommended seme	ster/trimester of the cours	e:
Course level: III.		
Prerequisities:		
Conditions for course completion:  The PhD student can apply for the defense of the dissertation for the relevant paper of the Rectorate or the Dean's Office, if the study program takes place at the faculty, if he has obtained at least 210 credits, if the study in the daily form is four years old and an external five years old, without including the credits for the dissertation defense. The application is submitted no later than 3 months before the scheduled completion of his PhD.  All information about the doctoral study is specified on the faculty's website in the Doctoral Study section, including the conditions of completion, which are detailed in the State Examinations section. Students will find here all the necessary information, forms and documents, including information on the formal side of the dissertation, which are in accordance with Directive No. 1/2011 on the basic requirements of final theses and the PhD Study Regulations at UPJŠ in Košice. The submitted work must be in accordance with the Rector's Decision No. 5/2021, issuing the principles of good practice of scientific publication at UPJŠ in Košice and its parts, Rector's Decision No. 21/2021, on issuing rules for the assessment of plagiarism at UPJŠ in Košice and its parts, Rector's Decision No. 2/2022 which issues the principles of good research practice at UPJŠ in Košice and its parts, Rector's Decision No. 2/2022 which issues the principles of good research practice at UPJŠ in Košice and its parts.		
Learning outcomes:		
Brief outline of the course:		
Recommended literature:		
Course language: english, slovak		
Notes:		
Course assessment Total number of assessed students: 62		
	abs	neabs
	100.0	0.0
Provides:		

**Date of last modification:** 23.03.2022

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

**Course ID:** Dek. LF | **Course name:** Supervision of bachelor thesis

UPJŠ/V/K-ZP/22

Course type, scope and the method:

**Course type:** 

Recommended course-load (hours):

Per week: Per study period: Course method: present

**Number of ECTS credits: 8** 

Recommended semester/trimester of the course:

Course level: III.

**Prerequisities:** 

## **Conditions for course completion:**

Supervision of bachelor thesis.

The doctoral student states the activity in the doctoral annual report and these activities are relevantly documented (e.g. publication, program).

## **Learning outcomes:**

By supervising the bachelor thesis, the doctoral student demonstrates the ability to use scientific knowledge and methods (e.g. laboratory, statistic) acquired by studying in the relevant field of study/study program. Can critically assess a professional problem and proposed solutions, evaluate it, or suggest other solutions. At the same time, it demonstrates the ability to transfer the acquired knowledge and skills.

#### **Brief outline of the course:**

#### **Recommended literature:**

## Course language:

english, slovak

**Notes:** 

#### Course assessment

Total number of assessed students: 13

abs	neabs
100.0	0.0

**Provides:** 

Date of last modification: 24.03.2022

University: P. J. Šafárik University in Košice

Faculty: Faculty of Medicine

Course ID: Dek. LF | Course

Course name: The direct pedagogical activity

UPJŠ/PC/22

Course type, scope and the method:

**Course type:** 

Recommended course-load (hours):

Per week: Per study period: Course method: present

**Number of ECTS credits: 2** 

#### **Recommended semester/trimester of the course:**

Course level: III.

# **Prerequisities:**

## **Conditions for course completion:**

The pedagogical activity of a doctoral student or other related professional activity in the range of up to four hours per week on average per academic year.

The doctoral student states the activity in the doctoral annual report and these activities are relevantly documented (e.g. publication, program).

## **Learning outcomes:**

Through pedagogical activities, the doctoral student demonstrates the ability to transfer and integrate knowledge from their own field of study/study program into education. Is able to design and implement part of the educational process (e.g. practical exercises, including the evaluation of partial results) in accordance with current trends in higher education. He is able to select and apply the right techniques and strategies of study group management in accordance with the requirements for the level of communication and digital competencies.

## **Brief outline of the course:**

#### **Recommended literature:**

#### **Course language:**

english, slovak

## **Notes:**

#### **Course assessment**

Total number of assessed students: 91

abs	neabs
100.0	0.0

## **Provides:**

Date of last modification: 23.03.2022

University: P. J. Šafárik University in Košice Faculty: Faculty of Medicine Course ID: Dek. LF Course name: Work in the conference organizing committee UPJŠ/OVK/22 Course type, scope and the method: **Course type:** Recommended course-load (hours): Per week: Per study period: Course method: present **Number of ECTS credits: 3** Recommended semester/trimester of the course: Course level: III. **Prerequisities: Conditions for course completion:** Work in the conference organizing committee. The doctoral student states the activity in the doctoral annual report and these activities are relevantly documented (e.g. publication, program). **Learning outcomes:** The doctoral student working in the organizing committee of the conference demonstrates the ability of teamwork in the preparation of a scientific or professional event. It declares the competence to manage the implementation of the event in terms of time and content, to communicate effectively in words and writing as needed in a foreign language at a professional level with different types of people. He/she can use various technical means, recommend and propose solutions and, if necessary, make independent decisions. **Brief outline of the course: Recommended literature: Course language:** english, slovak Notes: Course assessment Total number of assessed students: 6 abs neabs 100.0 0.0

**Approved:** prof. MUDr. Ladislav Mirossay, DrSc.

Date of last modification: 23.03.2022

**Provides:**