

Description of the study programme – outline¹

Name of the higher education institution: University of Prešov (UP)

Address of the higher education institution: Prešov

Identification number of the higher education institution: 717000000

Name of the faculty: Faculty of Humanities and Natural Sciences (FHNS)

Address of the faculty: Prešov

Institution body for approving the study programme: Board for the Internal Quality Assurance System of the University of Prešov in Prešov and Board for Quality of FHNS UP

Date of the study programme approval or the study programme modification: xx.xx.2021

Date of the latest change² in the study programme description:

Reference to the results of the latest periodic review of the study programme by the institution:

Reference to the assessment report of the application for accreditation of the study programme under § 30 of Act no. 269/2018 Coll.³:

1. Basic information about the study programme

- a) Name of the study programme and its number according to the register of study programmes.
Biology; UIPŠ code: 1536R00 (17228) = Bachelor
- b) Degree of higher education and ISCED-F education degree code.
1st degree (Bachelor), ISCED code: 645
- c) Place(s) of delivery of the study programme.
717000000 University of Prešov / 717050000 Faculty of Humanities and Natural Sciences
- d) Name and number of the field of study in which higher education is obtained by completing the study programme, or a combination of two fields of study in which higher education is obtained by completing the study programme, ISCED-F codes of the field/fields⁴.
Biology, 1536, ISCED-F code: 0511 Biology
- e) Type of the study programme:
Academically oriented study programme: Biology
- f) Awarded academic degree.
Bachelor
- g) Form of study⁵.
Full-time study
- h) In the case of joint study programmes, cooperating higher education institutions and the range of study obligations the student fulfills at each of the given institutions (§ 54a of the Act on Higher Education Institutions).
The study programme is not shared with another university.
- i) Language or languages in which the study programme is delivered⁶.
Slovak language
- j) Standard length of the study expressed in academic years.
3 years
- k) Capacity of the study programme (planned number of students), the actual number of applicants and students.
The capacity for full-time Bachelor study in the first year is up to 35 students. The number of applicants in academic year 2021/2022 was 52. The number of students is 31 (AY 2021/2022)

¹ The institution compiles a description of the study programme as an annex to the application for accreditation of the study programme.

- When submitting an application pursuant to § 30 (1) of Act no. 269/2018 Coll. the higher education institution states in the description only the data available at the time of application.

- Once the accreditation (or the internal approval of the study programme by the institution programme approval authority with the right to design programmes within the given field and degree) has been granted, the institution permanently makes the description available to the stakeholders of the study programme.

- The institution may choose the form of processing, visualization, and publication of the description, suitable for students, teachers and another users.

- In individual parts of the description, the institution may refer to another internal document that sufficiently describes the relevant area and is publicly available.

- In individual parts of the description, the institution may refer to a place in the information system which contains the relevant up-to-date information.

- The institution ensures that the description is up-to-date (if the change in the description is in the nature of a modification of the study programme and the change is made in accordance with § 30 (9) of Act No. 269/2018 Coll., the institution makes the change and publishes it only after approval by the Agency).

² If the change is not a modification of the study programme according to § 30 of Act no. 269/2018 Coll.

³ It is stated only if the accreditation of the study programme has been granted according to § 30 of Act no. 269/2018 Coll.

⁴ According to the International Standard Classification of Education. Fields of Education and Practice 2013.

⁵ According to § 60 of Act no. 131/2002 Coll. on Higher Education Institutions.

⁶ It means the languages in which all learning outcomes are achieved and all related courses of the study programme as well as the state examinations are carried out. The institution independently provides information on the possibility of partial study parts/courses in other languages in part 4 of the description.

2. Graduate profile and learning objectives

- a) The institution defines the learning objectives of the study programme such as student's abilities at the time of completion of the programme and the main learning outcomes⁷.

The level of qualification that students obtain on successful completion is clearly specified and communicated in the programme of study, whereby the qualification corresponds to the appropriate level of education according to the Qualifications Framework. The objectives and measurable learning outcomes correspond to the level of the Slovak National Qualifications Framework in the European Higher Education Area: first level - Bachelor, level SKKR 6.

Proof of qualification is a university diploma, a certificate of state examination and a diploma supplement after the completion of the first level Biology of Higher Education degree programme.

In accordance with the Slovak National Qualifications Framework (SKKR level 6), a Bachelor graduate has the following knowledge, skills and competences:

- has general knowledge at the level of synthesis,
- has practical and methodological knowledge in a key area of the discipline, which serves as a basis for practice, research
- can propose solutions to methodological, professional or practical problems,
- can modify general and specialist knowledge to solve specific professional problems,
- can implement solutions to methodological, professional or practical problems,
- can use methods, tools, instruments and materials creatively,
- is characterised by independence in solving specific problems in a changing environment,
- is good at planning his/her own learning,
- autonomy and responsibility in decision-making,
- the ability to present their own views appropriately and professionally,
- creative and flexible thinking.

(<https://www.minedu.sk/data/att/13619.pdf>).

Graduate profile and educational objectives in the context of the Description of the Study Field of Biology

The aim of education in the field of study Biology is to acquire theoretical and practical knowledge based on the current state of science. The graduate has comprehensive general knowledge in the field of study of biology. He/she is able to apply knowledge and solve problems focused on basic biological research and practical tasks of applied biology. He/she has practical and methodological knowledge of methods of research on living systems at different levels of their organisation (molecule, cell, individual, population, community, ecosystem). The student is able to assess and synthesize knowledge from the basic biological science disciplines (botany, zoology, microbiology, genetics, molecular and cell biology, evolutionary biology), as well as knowledge from some fields of chemistry and related natural science disciplines. The graduate has sufficient theoretical knowledge to understand the essential facts in biology, which he/she can creatively apply in solving partial tasks of basic and applied research. They can identify connections between biological science disciplines and other natural science disciplines. The graduate can propose solutions to methodological, professional and practical problems. He/she can work creatively with instrumentation and materials used in basic and applied biological research and analyse the acquired data using mathematical and statistical methods. Is able to work effectively as a member of a team and to coordinate a work team at an appropriate level of management. The graduate is characterised by independence in applying methods of logical and methodological analysis and solving theoretical and practical problems in a broader context. He/she is able to present the acquired knowledge in the field of biology to a wide professional as well as lay public, also in a foreign language.

Available at: <https://www.slov-lex.sk/pravne-predpisy/SK/ZZ/2019/244/20190901>

Specific graduate profile and learning objectives of the study programme Biology (Bachelor, full-time form)

Graduates of the study programme Biology are primarily prepared to continue their studies at the 2nd level of higher education in the relevant field of study. Graduates have a broad spectrum of knowledge in all areas of biological science disciplines, in chemical sciences and, as part of a broader scientific basis, in mathematics, physics and statistics. He/she has basic professional knowledge and skills in research methods at different levels of organization of living systems, which he/she is able to apply in solving practical tasks, to perform basic work in experimental biology, extracurricular activities. The vocational component of the study programme profiles the knowledge, skills and competences of the student of the 1st degree of the study programme in biology in such a way that at the time of completion of the study programme the student demonstrates the fulfilment of the following objectives:

Theoretical knowledge:

- Possesses theoretical knowledge and understands the essential facts, principles and theories in biology,
- can apply them to basic and applied biological research,
- understands the connections between biological science disciplines and other natural science disciplines.
- has a cross-sectional knowledge of the field of Biology with a focus on application at a level corresponding to the current state of knowledge
- has a broad knowledge and understanding of the specialised areas of Biology, including an appreciation of the practical contexts and relationships associated with the discipline of Biology.

Practical skills and abilities - a biology graduate will acquire the ability to:

- use the methods of biological and selected chemical and mathematical-statistical disciplines,
- work with instruments, equipment and materials in the field of basic and applied biological research,
- analyze and synthesize data obtained in experimental research and in the field,
- on the basis of the data obtained, propose a possible solution to a problem,

⁷ Learning objectives are achieved in the study programme through measurable learning outcomes in individual parts (modules, subjects) of the study programme corresponding to the relevant level of the Qualifications Framework in the European Higher Education Area.

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- can actively acquire information from the field of Biology and use it to solve practical tasks,
- can solve practical tasks in the field of Biology with the use of common research and development procedures, with critical assessment of their suitability and adequacy.

Competencies:

- The student is able to use the acquired knowledge and skills for professional and personal development,
- can communicate effectively, present conclusions and their justifications to professionals and the general public,
- identifies and appropriately applies ethical, social and other principles to his/her work,
- can solve professional tasks and coordinate sub-activities and be accountable for team results,
- can identify and evaluate the ethical, social and other contexts of the problems being addressed,
- can independently acquire new knowledge and actively expand his/her knowledge in the field of Biology.

The graduate is profiled by completing courses that develop his/her theoretical knowledge and skills, practical skills and abilities and competences as indicated in the course information sheets available on the public portal of the MAIS system:

<https://student.unipo.sk/maisportal/studijneProgramy.mais;jsessionid=2544DDDA91EC54DFD28389F06353EE34>

By completing the 1st degree of study of the SP Biology, the student will acquire the foundations for additional abilities and skills, which will be fully developed in the Master's degree of study and will enable to acquire the competences of teamwork and application of the acquired knowledge in their own creative and working activities.

- b) The institution indicates the professions for which the graduate is prepared at the time of completion and the potential of the study programme from the point of view of graduate's employability.

Due to the broad natural science outlook, graduates of the bachelor's degree of the study programme in Biology obtain a complete university education of the first degree in biology, which allows them to respond flexibly to the current, but also future demands of scientific and technological progress. On the basis of their professional and manual skills, they are mainly employed in research and application laboratories in biology, physics, chemistry, medicine and environment, including breeding, diagnostic and clinical laboratories, development and technical departments of academic and commercial workplaces, or companies engaged in molecular genetic analyses. Graduates may also find employment in government, local government, NGOs and the private sector. They are prepared to meet the requirements of specialized institutions requiring field work, but also, for example, in natural science departments of museums, libraries, botanical and zoological gardens. Despite the potential employment of graduates of the biology study programme on the labour market, graduates continue their further studies in the second cycle of higher education to a high extent and increase their qualifications in the follow-up master's study programme in biology, which will enable them to obtain professional qualifications with even wider opportunities for employment on the labour market.

- c) Relevant external stakeholders who have provided the statement or a favorable opinion on the compliance of the acquired qualification with the sector-specific requirements for the profession⁸.

The company IMUNA PHARM, a. s., based in Šarišské Michaľany and the company AdLa, s. r. o., based in Prešov, provided us with their evaluations and opinions. The reports on the comments on the study programme by the interested parties can be found in the Appendix Additional documents.

3. Employability

In accordance with the Decree No.56/2011 Coll., the acquired qualification of the graduates of the 1st degree of the study programme Biology enables, in accordance with the statistical classification of occupations SK ISCO-08, the applicability in the following occupations: 213 Specialists in the field of biological sciences, 2131001 Biologist, 2131005 Botanist, 2131006 Zoologist, 2131 Biologists, botanists and specialists in related disciplines.

- a) Evaluation of the study programme graduates employability.
- employment opportunities for graduates are addressed in the previous point 2(b).
 - The unemployment rate is 0%.
 - Statistical surveys of graduates' employability and employment show that only a minimal proportion of graduates are employed on the labour market; the majority of graduates of the first degree of the Biology study programme (more than 90%) continue their further studies at the second degree of higher education.

Available at: <https://uplatnenie.sk/?degree=V%C5%A0&vs=717000000&faculty=717050000&field=1536R00&year=2019>

Information on the employability or unemployment of graduates can be monitored through the Central Register of Students. Other necessary information can be generated by the study department of FHNS UP both from the CRS and from the records in UPSVaR.

- b) If applicable, indicate the successful graduates of the study programme.
As successful graduates of our study programme so far we can mention:
Mgr. Iveta Tóthová, PhD. – researcher, 1st Faculty of Medicine, Charles University
Mgr. Zuzana Gogaľová, PhD. – researcher, Academy of Sciences of the Czech Republic
- c) Evaluation of the study programme quality by employers (feedback).
Feedback with a focus on examining the quality of the study programme is carried out continuously in the framework of mutual cooperation, mostly through individual interviews with employees of different departments, focusing on the quality of the composition of the study programme and the quality of the profiling components of the graduates. The information obtained is evaluated during working sessions by members of the Department of Biology.

⁸ In the case of regulated professions in accordance with the requirements for the acquisition of professional competence pursuant to a special regulation.

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We consider the feedback from collaborating parties to be very important in terms of its contribution to innovation and improving the quality of the SP. We asked potential employers of our graduates to evaluate the quality of the submitted Biology SP. Their evaluations and opinions were provided by IMUNA PHARM, a. s., based in Šarišské Michaľany (represented by Mgr. Ema Jankaničová, PhD.) and AdLa, s. r. o., based in Prešov (represented by Ing. Lýdia Fejerčáková). The meetings were held via the MS Teams platform, e-mail and telephone communication. The minutes of the meetings were prepared in the Administrative records section (ADMIN_FACULTY).

We did not note any significant comments on the design, editing, composition of the PPE and the quality of the graduates. Substantiated comments were discussed at the working meetings of the study programme guarantors and incorporated into the description of the study programme. The alignment of the Biology programme and the incorporation of comments on the quality of the programme of study was carried out in accordance with the formalised processes of the internal system, which are embedded in the documents:

Basic Principles of Assurance and Evaluation of the Internal Quality System of the University of Prešov:

https://www.unipo.sk/public/media/37750/Opatrenie%20rektora%20%C4%8D_1_2021_V%C3%BDchodiskov%C3%A9%20principy%20zabezpe%C4%8Dovania%20VSK%20PU.pdf

Guidelines for the creation, modification, approval, cancellation of study programmes and submission of applications for accreditation of study programmes and disciplines of habilitation and inauguration procedures at the University of Prešov in Prešov:

https://www.unipo.sk/public/media/38257/Smernica%20%C5%A0OP_%20HK_%20IK%20PU.docx.pdf.

The documents declare an independent, unbiased, objective, professionally informed, transparent and fair assessment of the design and approval of the curriculum, involving students, employers and other stakeholders. It is also guaranteed that those assessing and approving the programme of study are different from those involved in the design of the programme of study.

All recent legislative changes and their requirements have been promptly incorporated in the curriculum.

Department of Biology working meetings on the Biology curriculum and Reports of stakeholder comments on the curriculum are located in the Administrative Records (ADMIN_FACULTY), as well as the Opinion of the person responsible for the curriculum on the incorporation of stakeholder comments on the curriculum.

4. Structure and content of the study programme⁹

a) *The institution describes the rules for the design of study plans within the study programme.*

The study programme takes into account the objectives set by the Faculty of Humanities and Natural Sciences in the field of science and its long-term goals, especially in the field of education. The study programme has been developed / innovated in the context of the tendencies of the development of such programmes in Europe and in the world, considering the attractiveness for secondary school students. The study programme was created in accordance with the needs of practice, therefore one of the main aspects in the conception of courses was the aspect of applicability of knowledge and competences in real practice.

- The main starting points in the development of the study plan of the Biology study programme are:
- - Description of the field of study No. 3 Biology
- - Graduate profile
- - Areas profiling and forming the core of the field of study and the study programme
- - Legislation of the credit system of study

Internal regulations of the UP in Prešov (<https://www.unipo.sk/vzdelavanie/vnutorne-predpisy/>;
https://www.unipo.sk/public/media/37750/OR_x-2021_zosuladovanie.pdf)

Long-term plan of FHNS U: <https://www.unipo.sk/fakulta-humanitnych-prirodných-vied/rozvoj/dlhodoby-zamer/>

Selected characteristics of the study programme content are given directly in the Course Information Sheets, which are available from: <https://student.unipo.sk/maisportal/studijneProgramy.mais.jsessionid=2544DDDA91EC54DFD28389F06353EE34>

The study programme reflects the mission, but also the goals set by the Faculty of Humanities and Natural Sciences in the field of science and research and in the field of education. The study programme has been developed in the context of the trends in the development of such programmes in Europe and the world, taking into account the attractiveness for secondary school students. The study programme was developed in accordance with the needs of practice, therefore one of the main aspects in the design of courses was the aspect of applicability of knowledge and competences in real practice. The profile subjects of the study programme are compulsory or compulsory optional subjects designed to provide the student with the knowledge or skills essential for the completion of the study programme. Profile subjects represent the theoretical and methodological basis in the relevant field of education. Together with other educational activities offered to the student in the form of optional courses, they will enable the student to access the knowledge and skills relevant for the achievement of the learning outcomes in the graduate profile and his/her personal and professional development. In accordance with the Dublin Descriptors and also in the light of the National Qualifications Framework, graduates of the SP will obtain a level 6 qualification (SKKR 6).

- Selected characteristics of the study programme content are directly presented in the Course Information Sheets, which are available at: <https://student.unipo.sk/maisportal/studijneProgramy.mais.jsessionid=2544DDDA91EC54DFD28389F06353EE34>

Rector's Directive no. 10/2021: https://www.unipo.sk/public/media/37750/OR_x-2021_zosuladovanie.pdf

b) *The institution compiles the recommended study plans for individual study paths¹⁰.*

⁹ Selected characteristics of the content of the study programme can be stated directly in the Course information sheets or supplemented by the information of the Course information sheets.

¹⁰ In accordance with Decree no. 614/2002 Coll. on the study credit system and Act no. 131/2002 Coll. on Higher Education Institutions and on Amendments to Certain Acts.

The outline description of the study programme is used to process Annex 2 of the application for granting the accreditation of the study programme.

Pursuant to par. 3 of Decree No. 614/2002 Coll. On the credit system of study Courses included in the study programme Biology according to the obligation of their completion are divided into:

- compulsory - their successful completion is a condition for successful completion of part or the entire study programme,
- compulsory optional subjects - the condition for successful completion of a part of the study or the entire study programme is the successful completion of a specified number of these subjects according to the student's choice in the structure determined by the study programme,
- optional subjects - other subjects which the student has the possibility to enrol in order to supplement his/her studies and to obtain a sufficient number of credits in the relevant part of the study (§ 51(4)(i) of the Act).

Courses included in the study programme are subdivided according to their continuity into:

- subjects conditional on successful completion of other subjects; enrolment in such a subject is conditional on successful completion of another subject (a prerequisite subject) or other subjects,
 - courses without a follow-on; enrolment in such a course is not conditional on the completion of another course
- The state examination (§ 63 (1) of the Act) is considered a subject.

Available from: https://www.slov-lex.sk/pravne-predpisy/SK/ZZ/2002/614/vyhlase_znenie.html

Course Information Sheets:

<https://student.unipo.sk/maisportal/studijneProgramy.mais;jsessionid=2544DDDA91EC54DFD28389F06353EE34>

Study Rules UP: <https://www.unipo.sk/public/media/11422/Study%20Rules%20of%20the%20University%20of%20Presov.pdf>

Rector's Directive no. 10/2021: https://www.unipo.sk/public/media/37750/OR_x-2021_zosuladovanie.pdf

c) *The study plan generally states:*

- *individual parts of the study programme (modules, courses, and other relevant school and extracurricular activities, if they contribute to the achievement of the required learning outcomes and allow to obtain credits) in the structure of compulsory, compulsory optional and optional courses,*

Recommended study plan

Field of study: Biology

Study programme: Biology

Degree: 1. (Bachelor)

Form: full-time (3 years)

A. Learning part – compulsory courses

Code	Compusory Units	ECTS credit	Scope	Form of completion	Year	Semester	Name of the teacher
	Cytology*	6	2/0/1	E	1.	1.	Assoc. Prof. RNDr. Iveta Boroňová, PhD.; PaedDr. Silvia Duranková, PhD.
	General botany*	6	2/0/1	E			Assoc. Prof. RNDr. Vincent Sedlák, PhD.; RNDr. Michaela Žigová, PhD.
	Laboratory investigative methods 1*	5	1/0/2	E			Assoc. Prof. MVDr. Soňa Mačková, PhD.; Mgr. Andrea Babejová, PhD.
	English language 1	4	1/2/0	E			Mgr. Lucia Hartmannová, PhD.
	Latin language 1	4	0/2/0	E			Mgr. Slavka Oriňáková, PhD.
	Plant Physiology*	5	1/0/1	CA			Assoc. Prof. Ruslan Mariychuk, CSc.; RNDr. Daniela Gruňová, PhD.
	Human Biology*	5	2/2/0	E		2.	Assoc. Prof. MVDr. Soňa Mačková, PhD.
	Histology*	5	2/0/1	E			Assoc. Prof. MVDr. Soňa Mačková, PhD.
	Animal Morphology*	4	2/0/1	E			prof. PaedDr. Ján Koščo, PhD.; RNDr. Alexander Csanády, PhD.
	English language 2	3	0/2/0	CA			Mgr. Lucia Hartmannová, PhD.
	Latin language 2	3	0/2/0	CA			Mgr. Slavka Oriňáková, PhD.

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	Botanics 1*	6	2/0/2	E	2.	3.	prof. RNDr. Ivan Šalamon, CSc., MBA
	Microbiology*	5	1/0/2	E			Assoc. Prof. RNDr. Marta Mydlárová Blaščáková, PhD.
	Genetics *	5	2/0/1	E			prof. MVDr. Janka Poráčová, PhD., MBA; Assoc. Prof. RNDr. Marta Mydlárová Blaščáková, PhD.
	Human Embryology*	5	2/1/0	E			Assoc. Prof. RNDr. Eva Petrejčíková, PhD.; Mgr. Andrea Babejová, PhD.
	Zoology 1*	6	2/0/2	E			Assoc. Prof. Mgr. Peter Manko, PhD.
	Botanics 2*	6	2/0/2	E		4.	Assoc. Prof. Ing. Jozef Fejér, PhD. RNDr. Adriana Eliášová, PhD.
	Biochemistry*	5	2/0/2	E			prof. MVDr. Janka Poráčová, PhD., MBA; RNDr. Mária Konečná, PhD.
	Molecular biology 1*	5	2/0/2	E			Assoc. Prof. RNDr. Eva Petrejčíková, PhD.; Mgr. Andrea Babejová, PhD.
	Zoology 2*	6	2/0/2	E			prof. PaedDr. Ján Koščo, PhD.
	Animal and human physiology*	6	2/0/2	E		5.	prof. MVDr. Janka Poráčová, PhD., MBA; Assoc. Prof. RNDr. Vincent Sedlák, PhD.; RNDr. Mária Konečná, PhD.
	Bachelor thesis seminar 1	4	0/2/0	A	3.		Assoc. Prof. RNDr. Dana Dojčáková, PhD.
	Evolutionary biology*	5	1/1/0	E			prof. MVDr. Janka Poráčová, PhD. MBA; RNDr. Mária Konečná, PhD.
	Bachelor thesis seminar 2	4	0/1/0	A		6.	Assoc. Prof. RNDr. Dana Dojčáková, PhD.

Notes:

*Profile subjects

¹ - the compulsory course Laboratory investigative methods is a prerequisite for the compulsory course Molecular biology 1

² - the compulsory subject Botany 1 is a prerequisite for the compulsory subject Botany 2

State exam courses

Code	Name of the subject	ECTS credit	Scope	Form of completion	Year	Semester	Name of the teacher
	Bachelor thesis defence*	12		E State exam	3.	6.	Assoc. Prof. RNDr. Iveta Boroňová, PhD.
	Biology*	4		E State exam	3.	6.	Assoc. Prof. RNDr. Iveta Boroňová, PhD.

B. compulsory optional courses

Code	Compusory Units	ECTS credit	Scope	Form of completion	Year	Semester	Name of the teacher
	Mathematics for Bilogists *	4	2/0/2	CA	1.	2.	Assoc. Prof. Mgr. Ján Brajerčík, PhD.
	General and inorganic chemistry*	4	2/0/2	E	2	ST	Assoc. Prof. Ruslan Mariychuk, CSc.; RNDr. Romana Smolková, PhD.

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	Ethology	4	2/0/1	E	2	ST	Assoc. Prof. RNDr. Marta Mydlárová Blaščáková, PhD.; RNDr. Alexander Csanády, PhD
	History of biology	2	0/1/0	CA	2	ST	RNDr. Michaela Žigová, PhD.
	Nutrition and human health	3	1/2/0	CA	2	ST	PaedDr. Silvia Duranková, PhD.
	Basis of Biohysics*	3	1/0/2	CA	2.	3.	Assoc. Prof. RNDr. Marta Mydlárová Blaščáková, PhD.; PaedDr. Silvia Duranková, PhD.
	English language 3	3	0/2/0	CA	2	ST	Mgr. Lucia Hartmannová, PhD.
	Latin Terminology 1	3	0/2/0	CA	2	ST	Mgr. Slavka Oriňáková, PhD.
	Model organisms	3	2/0/0	CA	2	3.	RNDr. Michaela Žigová, PhD.
	Organic chemistry*	4	2/0/2	E	2.	3.	doc. Ruslan Mariychuk, CSc.; RNDr. Romana Smolková, PhD.
	Information and communication technologies for biologists	3	1/0/1	CA	2.	4.	Ing. Oleg Tkáč, PhD.
	English language 4	3	0/2/0	CA	2.	4.	Mgr. Lucia Hartmannová, PhD.
	Latin terminology 2	3	0/2/0	CA	2.	4.	Mgr. Slavka Oriňáková, PhD.
	Selected chapters from cytology of plants and animals	2	1/0/0	CA	2.	4.	doc. RNDr. Iveta Boroňová, PhD.; RNDr. Jana Gaľová, PhD.
	Analytical chemistry	4	1/0/2	CA	2.	4.	doc. Ruslan Mariychuk, CSc.; RNDr. Romana Smolková, PhD.; RNDr. Adriana Eliášová, PhD.; RNDr. Daniela Gruľová, PhD.
	Infectious diseases	4	0/2/0	E	2.	4.	doc. MVDr. Soňa Mačeková, PhD.
	Elements of research and biostatistics*	4	2/2/0	E	3.	5.	doc. Mgr. Ján Brajerčík, PhD.; Mgr. Mária Majherová, PhD.
	Field practice in botany and zoology*	2	16 h	passed	3.	5.	doc. Mgr. Peter Manko, PhD.; RNDr. Daniela Gruľová, PhD.
	Pathobiochemistry*	4	2/0/0	E	3.	6.	doc. RNDr. Vincent Sedlák, PhD.; RNDr. Mária Konečná, PhD.
	Selected chapters from plant anatomy, morphology and ecotoxicology	4	1/1/0	E	3.	6.	doc. RNDr. Vincent Sedlák, PhD.; RNDr. Michaela Žigová, PhD.
	Human development biology	3	2/1/0	E	3.	6.	doc. RNDr. Eva Petrejčíková, PhD.; PaedDr. Silvia Duranková, PhD.

Notes:

*Profile subjects

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C - optional courses

Code	Compusory Units	ECTS credit	Scope	Form of completion	Year	Semester	Name of the teacher
	Basics of biological research and bioethics 1	1	0/1/0	A	2.	4.	RNDr. Michaela Zígová, PhD.; Assoc. Prof. MVDr. Soňa Mačková, PhD.

The student chooses optional courses from the university-wide course offer. For optional courses, a student may earn a maximum of 5% of the total number of credits required for the proper completion of studies during the course of his/her studies.

- **profile courses** of the relevant study path (specialization) within the study programme,
In the Biology study programme description, the profile subjects are marked with * (asterisk).

- for each learning part/course the learning outcomes, related criteria and rules of their assessment so that the learning objectives of the study programme are met (they can be stated only in the Course information sheets, in the Learning outcomes section and in the Course completion requirements),

Learning outcomes, criteria, and rules for assessment of individual courses and educational parts are given in the Course Information Sheets in the Learning Outcomes and Course Completion Requirements sections.

Course Information sheets:

<https://student.unipo.sk/maisportal/studijneProgramy.mais;jsessionid=2544DDDA91EC54DFD28389F06353EE34>

- prerequisites, co-requisites and recommendations for the design of the study plan,

Courses creating links (interconnections), i.e. requiring continuity in the development of knowledge, abilities and especially practical skills are supplemented by prerequisites. The course prerequisite is listed in the MAIS with reference to the course information sheet. The obligation given by the prerequisite must be fulfilled before enrolment in the next course. The course information sheet (MAIS) lists the course, the proper completion of which is a condition for enrolment in the course.

Study Rules UP: <https://www.unipo.sk/public/media/11422/Study%20Rules%20of%20the%20University%20of%20Presov.pdf>

Course information sheets:

<https://student.unipo.sk/maisportal/studijneProgramy.mais;jsessionid=2544DDDA91EC54DFD28389F06353EE34>

- for each learning part of the study plan/course the applied educational activities (lecture, seminar, exercise, final work, project work, laboratory work, internship, excursion, field practice, professional practice, state exam, etc. or their combinations) suitable for achieving learning outcomes,

Educational activities, forms and methods for each course and for each educational activity are listed in the Course Information Sheets under Type, load and method of educational activities and are made available to students in MAIS UP.

Course Information sheets:

<https://student.unipo.sk/maisportal/studijneProgramy.mais;jsessionid=2544DDDA91EC54DFD28389F06353EE34>

- methods by which the educational activity is delivered – present, distant, combined (in accordance with the Course information sheets),

The methods for the implementation of the learning activities are set out in the Course Information Sheets: <https://student.unipo.sk/maisportal/studijneProgramy.mais;jsessionid=2544DDDA91EC54DFD28389F06353EE34>

- outline/syllabus of the course¹¹,

The syllabus for each course is listed in the Course Information Sheet.

During the assessment, the teachers providing the courses will give the working group access to other course materials and the content of the individual learning activities.

- student workload ("extent" of individual courses and educational activities separately)¹²,
Student workload within the individual courses and learning activities (contact and non-contact teaching and activities) of the RSP of the study programme Biology is given in the individual course information sheets.

The RSP SP takes into account the credit system based on the principle of assessing the learner's workload. It uses the recommendations of the ECTS system for the accumulation and transfer of credits, which is based on the principle of transparency of learning, teaching and assessment processes.

ECTS Users' Guide 2015: <https://op.europa.eu/en/publication-detail/-/publication/da7467e6-8450-11e5-b8b7-01aa75ed71a1>

Course Information Sheets:

<https://student.unipo.sk/maisportal/studijneProgramy.mais;jsessionid=2544DDDA91EC54DFD28389F06353EE34>

Study Rules UP: <https://www.unipo.sk/public/media/11422/Study%20Rules%20of%20the%20University%20of%20Presov.pdf>

Rector's Directive 10/2021: https://www.unipo.sk/public/media/37750/OR_x-2021_zosuladovanie.pdf

- credits allocated to each part based on the learning outcomes achieved and the workload involved,

¹¹ During the assessment, teachers responsible for the course will allow the working group access to the study materials of the course and the content of individual educational activities.

¹² We recommend indicating the workload of contact and non-contact teaching in accordance with the ECTS Users' Guide 2015.

The outline description of the study programme is used to process Annex 2 of the application for granting the accreditation of the study programme.

The credits allocated to individual courses, learning outcomes and learning activities are attributed to the student's workload. The number of credits and the student's workload are specified separately in each Course Information Sheet. When determining the student workload, it has been assumed that 1 credit corresponds to 30 hours of student work.

ECTS Users' Guide 2015: <https://op.europa.eu/en/publication-detail/-/publication/da7467e6-8450-11e5-b8b7-01aa75ed71a1>

Course Information Sheets:

<https://student.unipo.sk/maisportal/studijneProgramy.mais;jsessionid=2544DDDA91EC54DFD28389F06353EE34>

- *the person responsible for the course (or a partner organization/person¹³) with an indication of the contact details,*
The names of the teachers providing individual courses and educational activities in accordance with the RSP are given in the Course Information Sheets.

prof. MVDr. Janka Poráčková, PhD., MBA; E-mail: janka.poracova@unipo.sk; Telefón: (+421)0517570309
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Assoc. Prof. RNDr. Marta Mydlárová Blaščáková, PhD.; E-mail: marta.blascakova@unipo.sk; Telefón: (+421)0517570398
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prof. RNDr. Ivan Šalamon, CSc., MBA; E-mail: ivan.salamon@unipo.sk; Telefón: (+421)0517570662
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Ing. Oleg Tkáč, PhD.; E-mail: oleg.tkac.sk; Telefón: (+421)0517563161

Course Information Sheets:

<https://student.unipo.sk/maisportal/studijneProgramy.mais;jsessionid=2544DDDA91EC54DFD28389F06353EE34>

- *course teachers (or participating partner organizations/persons) (may also be mentioned in Course information sheets),*
The names of the teachers providing individual courses and educational activities in accordance with the Biology RSP are given in the Course Information Sheets.

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Assoc. Prof. RNDr. Marta Mydlárová Blaščáková, PhD.; E-mail: marta.blascakova@unipo.sk; Telefón: (+421)0517570398
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Course Information Sheets:

<https://student.unipo.sk/maisportal/studijneProgramy.mais;jsessionid=2544DDDA91EC54DFD28389F06353EE34>

¹³ E.g. when providing the professional practice or other educational activities carried out outside the university.

The outline description of the study programme is used to process Annex 2 of the application for granting the accreditation of the study programme.

Doctoral students are also involved in the pedagogical process, who, as part of their pedagogical activities, conduct exercises and seminars of selected subjects during the academic year after approval by the study programme guarantor.

- *places where the courses are taught (if the study programme is delivered at several workplaces).*

All subjects and educational activities of the SP of Biology are implemented in the classrooms and laboratories of the Department of Biology and the Centre of Excellence for Animal and Human Ecology of the FHNS of the University of Prešov.

- d) *The institution states the number of credits, the achievement of which is a condition for proper completion of studies and other requirements that the student must meet within the study programme and for its proper completion, including the requirements for state examinations, rules for re-study and rules for the extension, interruption of study.*

The organisation of all levels and forms of higher education at the university is based on the credit system of study. The student is obliged to obtain the necessary number of credits in the study programme, the distribution and total number of which is determined by the accredited study programme. The standard student workload for one academic year is expressed in the full-time form of study as a minimum of 60 credits (30 credits per semester). The total number of credits, the achievement of which is a condition for the proper completion of studies, for the Bachelor's degree programme as a first degree study programme with a standard length of study, shall be at least 180 credits. The duration of the study must not exceed the standard length of the study programme by more than two years.

The study programme may be interrupted at the request of the student. The period of interruption is not included in the standard length of study and is recorded in the MAIS.

The guarantor of the relevant study programme is responsible for the content of the study programme. The study programme, including its content, is reviewed by the Board for the Internal Quality Assurance System at the FHNS and the final version is subsequently reviewed by the Faculty's Scientific Board

All the information required under (d) is provided in Articles 10 through 22 of the 2018 Study Rules UP.

Link: <https://www.unipo.sk/public/media/0190/STUD%2024.9.18%20pdf.pdf>

Rector's Directive No. 10/2021: https://www.unipo.sk/public/media/37750/OR_x-2021_zosuladovanie.pdf

- e) *For individual study plans, the institution states the requirements for completing the individual parts of the study programme and the student's progress within the study programme in the given structure:*

- *number of credits for compulsory courses required for proper completion of studies/completion of a part of studies,*

The student is obliged to obtain the necessary number of credits in the study programme, the distribution and total number of which is determined by the accredited study programme. PU students usually enrol in courses in such a way that the composition of courses in a given study programme is approximately 70 % for compulsory courses, 25 % for optional courses and a maximum of 5 % of the credit endowment for optional courses.

Note: The credits for the compulsory units include the credits awarded for the subjects of the state final examination - Bachelor's Thesis Defence and Biology.

According to the RSP SP Biology it is:

- 1st year of study: 50 credits
- 2nd year of study: 43 credits
- 3rd year of study: 41 credits

Total number of credits obtained for compulsory courses: 134 credits

- *number of credits for compulsory optional courses required for the proper completion of studies/completion of a part of studies,*

According to the RSP of the SP Biology, the student for the compulsory optional courses receives:

- 1st year of study: 17 credits
- 2nd year of study: 31 credits
- 3rd year of study: 21 credits

Total number of possible credits for compulsory optional courses: 68 credits

- *number of credits for optional courses required for the proper completion of studies/completion of a part of studies,*

According to the RSP of the SP Biology, the student receives for optional courses:

2nd year of study: 1 credit

The student enrolls in optional courses so that the sum of their credit endowment is no more than 5% of the total number of credits (in the first degree of study, a maximum of 9 credits). Optional courses taken or accepted in excess of 5 % are not counted towards the number of credits required for the proper completion of studies. If a student has achieved a sufficient number of credits by completing the compulsory and compulsory optional courses, he/she does not have to enrol in any optional course. All the courses taken shall be indicated in an addendum to the diploma.

Study Rules UP: <https://www.unipo.sk/public/media/11422/Study%20Rules%20of%20the%20University%20of%20Presov.pdf>

The outline description of the study programme is used to process Annex 2 of the application for granting the accreditation of the study programme.

Rector's Directive No. 10/2021: https://www.unipo.sk/public/media/37750/OR_x-2021_zosuladovanie.pdf

- *number of credits required for the completion of studies/completion of a part of the studies for the common foundations and for the relevant specialization, in the case of a teaching combination study programme or a translation combination study programme,*
- SP Biology is neither a teacher training combination programme, nor a translation combination study programme,

- *number of credits for the final thesis and the defense of the final thesis required for the proper completion of studies,*

The total number of credits for the Bachelor thesis defence is 12.

- *number of credits for professional practice required for the proper completion of studies/completion of a part of studies,*

Students do not undertake professional practice within the SP Biology.

- *number of credits required for the proper completion of studies/completion of a part of the studies for project work with the indication of relevant courses in engineering study programmes,*

It is not an engineering study programme.

- *number of credits required for the proper completion of studies/completion of a part of the studies for artistic performances in addition to the final thesis in art study programmes.*

It is not a study programme with an artistic focus.

- f) *The institution describes the rules for verification of learning outcomes, students' assessment and the possibilities of appealing against the assessment.*

The rules for the verification of learning outcomes and the assessment of students and the possibilities of corrective procedures against this assessment state:

- Art. 15 through 22 of the Study Rules UP of 2018:
<https://www.unipo.sk/public/media/11422/Study%20Rules%20of%20the%20University%20of%20Presov.pdf>
- Disciplinary Regulations of the UP in Prešov -
https://www.unipo.sk/public/media/files/docs/u/svk/disciplinarny_poriadok_08.pdf

- g) *Conditions for recognition of studies or a part of studies.*

The conditions under which courses of study or credits are recognised are set out in Article 20 of the Study Rules. The application for recognition of a course and the award of credits for the course in question is submitted by the student to the study department of the home faculty or university. Recognition can only be granted for a course where there is a minimum content match of 60% with a course from the current study programme.

Study Rules UP: <https://www.unipo.sk/public/media/11422/Study%20Rules%20of%20the%20University%20of%20Presov.pdf>

- h) *The institution states the topics of final theses of the study programme (or a link to the list).*

The list of recommended thesis topics is published annually by individual faculty departments in accordance with the Study Rules of the UP in Prešov, no later than 30th November of the academic year in MAIS. The thesis topics are approved by the head employee of the scientific and pedagogical department in agreement with the supervisor, so that the sum of the thesis topics at the first and second level of study, led by one employee, does not exceed ten in one academic year. The supervision of the thesis is subject to the condition that the supervisor of the thesis should have at least one level of higher education or qualification than the thesis being supervised (the only exceptions being practitioners), and that the topic should correspond to the supervisor's scientific-pedagogical profile.

Suggested thesis topics:

DNA identification analysis in twins
Diagnostic possibilities of COVID-19 using molecular biological methods
Methods and techniques in genetic engineering
Cytogenetic markers involved in the aetiopathogenesis of fertility disorders
Prognostically relevant oncocytogetic markers useful in clinical practice
Analysis of bone markers in relation to complications of osteoporosis
The leptin gene and its important role in body weight control and bone remodeling
Methods for the evaluation of antimicrobial activity in vitro
Virulence factors of uropathogenic *Escherichia coli* in the development of urinary tract infection and renal damage
Health risks and consequences of tattooing
The importance of odorology in the identification of persons
Archaic DNA and the determination of paternal and maternal lineages
Application of human iris biometrics
Analysis of dermatoglyphic patterns of human papillary lineages

The outline description of the study programme is used to process Annex 2 of the application for granting the accreditation of the study programme.

Biological activity of secondary metabolites of invasive plants
Characterization of selected genetic polymorphisms in relation to obesity
Infectious and invasive diseases in Slovakia
Molecular methods in the diagnosis of complex diseases
Approaches in the treatment of atrial fibrillation
Importance and potential of screening and diagnostic tests
Risk factors in the working environment of a biological laboratory and their impact on health
Anthropometric characteristics of newborns
Anthropometric characteristics of preschool children
Selected head measurements of the adult population
Change in haematological parameters in patients with leukaemia
Liver and selected liver diseases
Osteoarthritis and its complications
Methods of estimating body height on skeletal material
Neurological diseases
Degenerative and inflammatory diseases of the joints and spine
Use of molecular point-of-care (POC) testing COVID19
Genetic variants of PCSK9 and their significance in lipid metabolism
The role of novel hypolipidemics in the treatment of hypercholesterolaemia
Caloric restriction and intermittent fasting in the prevention of type 2 diabetes mellitus
Cataloguing and somatometric evaluation of the collections of the Šariš Museum in Bardejov - Carnivora series
Morphometric analysis of pelvic bones of selected species of the genus *Mus* (Rodentia) from Slovakia
Morphometric analysis of scapular bones of selected species of the genus *Mus* (Rodentia) from Slovakia
Epigenetic processes in tumour tissue
Genetically modified crops
Obesity and Covid 19

The thesis topics are regularly published in MAIS UP (<https://www.unipo.sk/cvtpu/hlavne-sekcie/MAIS/intro/>) and on the websites of faculty departments or teachers.

i) *The institution describes or refers to:*

- *rules for the assignment, processing, opposition, defense and evaluation of final theses in the study programme,*
The University has established a coherent system of processes ensuring the procedure for the preparation and organisation of theses at all levels of study. The basic document is the Directive on the requirements of theses, their bibliographic registration, originality control, preservation, and accessibility, issued by the UP Rector in 2019. The Directive specifies the general provisions, basic concepts, characteristics and formality of theses, ethics and technique of citation and bibliographic references, structure of the thesis, submission, originality control and accessibility, the competence of the University, its components, and the competence of the author of the thesis, information about the central register of theses and the competence of the Ministry and the University, final provisions.
The procedures for the specification of final thesis in bachelor degree, their processing, defence and evaluation are set out in the UP Study Rules, Articles 23.

Available at: <https://www.pulib.sk/web/data/pulib/subory/stranka/ezp-smernica2019.pdf>

Study Rules UP: <https://www.unipo.sk/public/media/11422/Study%20Rules%20of%20the%20University%20of%20Presov.pdf>

- *opportunities and procedures for participation in student mobility,*
The UP Study Rules, in the section on the organisation of educational activities, address the student's right to complete part of his/her studies at another higher education institution in the Slovak Republic or abroad. Approval for mobility is granted by the dean/rector or the vice-rector for international affairs and marketing. The part of the study is recognised in accordance with the Treaty, the European Standard and the European Credit Transfer System.
The Erasmus+ programme has been a key platform for the development of international cooperation at the University of Prešov for more than 20 years. PU's involvement in the Erasmus+ programme contributes to the fulfilment of PU's strategic development goal aimed at the modernisation and internationalisation of education in the context of building a common European Education Area (EHEA). Support for mobility directly contributes to deepening the degree of internationalisation, increasing the quality and relevance of education as an important prerequisite for personal development, adaptability and flexibility of PU students and employees in the labour market and their civic engagement.

The Rector's Directive "Procedure for the implementation of outgoing student mobility within the Erasmus+ programme" is issued at the University of Presov (UP) on the basis of the provisions of Section 15(1)(l) of Act No. 131/2002 Coll. on Higher Education and on Amendments and Additions to Certain Acts, as amended. With this Rector's Directive, the UP management determines the activities of individual actors related to the realisation of student mobility abroad under the Erasmus+ programme. By this Rector's Directive, the PU management determines the course of activities of individual actors related to the implementation of student mobility abroad within the Erasmus+ programme. The Rector's Decision responds to the main ideas of the Bologna Process, to create an internationally recognised European common higher education area on the basis of commonly accepted standards and norms of education quality.

The degree of correlation of the study programme abroad with the given study programme is evaluated by the study guarantor. The credits earned by the student are recognised on the basis of a Credit Transfer Agreement. Missed coursework may be made up within the requirements of the programme of study.

The outline description of the study programme is used to process Annex 2 of the application for granting the accreditation of the study programme.

Credits are assessed on the basis of their acquisition, i.e. the degree of compliance of the completed coursework with the given study programme is evaluated by the guarantor of the study. In the case of a match, the credits are accepted on the basis of a Credit Transfer Agreement, or the missed coursework can be made up within the requirements of the study programme.

Student mobility is arranged and guided by a coordinator appointed by the Rector or Dean. His/her task is to prepare and execute the programme of international cooperation in the educational field, to deal with the tasks related to the placement and admission of students, and to provide advisory services to students on the possibilities of studying at other universities in the Slovak Republic and abroad.

Study Rules UP: <https://www.unipo.sk/public/media/11422/Study%20Rules%20of%20the%20University%20of%20Presov.pdf>

University website: <https://www.unipo.sk/zahranicie/erasmus/>

Rector's Directive: [https://www.unipo.sk/public/media/34448/1_OR\(2014\)-08-Erasmus_odchadzajuce_mobility_studenti_postup.pdf](https://www.unipo.sk/public/media/34448/1_OR(2014)-08-Erasmus_odchadzajuce_mobility_studenti_postup.pdf)

- *rules for adherence to academic ethics and rules for drawing consequences,*

The rules of academic ethics and consequences are stated in the document Code of Ethics of the University of Prešov.

Research Integrity and Ethics available from:

<https://www.unipo.sk/public/media/38250/Etick%C3%BD%20k%C3%B3dex%20Pre%C5%A1ovskej%20univerzity%20v%20Pre%C5%A1ove.pdf>

- *procedures applicable to students with specific needs,*

In accordance with Section 100(11) of Act No. 131/2002 Coll. on Higher Education and on Amendments and Additions to Certain Acts, as amended (hereinafter referred to as the "Higher Education Act") and Decree No. 458/2012 Coll. on Minimal Requirements for Students with Specific Needs, the document creates a generally accessible academic environment and appropriate study conditions for students with specific needs without reducing the requirements for their study performance. The diversity of specific needs of applicants for study and acceptance of their scope is presented in the Methodological Guide for Students with Specific Needs, approved at the AS of UP meeting in 2017.

Methodology Guide: https://www.unipo.sk/public/media/0190/METODIKA_%C5%A0%C5%A0P_april2017.pdf

- *procedures for filing complaints and appeals by students.*

For student complaints and appeals, the procedures regarding:

- admission to the school,
- examinations
- accommodation
- criminal activity

are governed by the Complaints Act No. 9/2010 Coll. and its amendment No. 94/2017 Coll. (<https://www.aspi.sk/products/lawText/1/88314/1/2/zakon-c-94-2017-zz-ktorym-sa-meni-a-doplna-zakon-c-9-2010-zz-o-staznostiach-v-zneni-neskorsich-predpisov/zakon-c-94-2017-zz-ktorym-sa-meni-a-doplna-zakon-c-9-2010-zz-o-staznostiach-v-zneni-neskorsich-predpisov>).

Upon a justified case, the student has the possibility to request the correction of the results of the assessment. A student is entitled to two make-up examination dates in a given course in the academic year in which the course is enrolled, within the announced examination dates and the academic year schedule. At the student's request, the examiner will allow a make-up examination even if the student has successfully passed the regular examination date. A make-up examination date will be registered in the MAIS. If the student requests it, the Vice-Dean/Provost for Educational Affairs may allow a make-up examination to be given in justified cases before a committee appointed by the Dean/Rector. A board examination may be demanded from the faculty's study department no later than five working days after the regular examination date or the first make-up examination date. Students can submit suggestions via the "black box", i.e. in the form of an anonymous electronic form. Suggestions are registered through the student representatives of the AS FHNS, who then delegate them to the relevant departments according to the content of the suggestion.

Study Rules UP: <https://www.unipo.sk/public/media/11422/Study%20Rules%20of%20the%20University%20of%20Presov.pdf>

Black Box: <https://www.unipo.sk/fakulta-humanitnych-prirodnych-vied/informacie-pre-studentov/cierna-skrinka/>

5. Course information sheets of the study programme

In the structure according to Decree no. 614/2002 Coll.

The information sheets of all courses of the study programme Biology are available at:

<https://student.unipo.sk/maisportal/studijneProgramy.mais;jsessionid=2544DDA91EC54DFD28389F06353EE34>

6. Current academic year plan and current schedule (or hyperlink).

The current academic year schedule can be found on the website.

Available at:

https://www.unipo.sk/public/media/2877/Harmonogram_AR_21_22-1.pdf

The current timetable of the study programme Biology for the academic year 2021/2022 is available at:

<https://student.unipo.sk/maisportal/rozvrhy.mais>

7. Persons responsible for the study programme

The outline description of the study programme is used to process Annex 2 of the application for granting the accreditation of the study programme.

- a) A person responsible for the delivery, development, and quality of the study programme (indicating the position and contact details).

Main guarantor:

Assoc. Prof. RNDr. Iveta Boroňová, PhD.; docent; E-mail: iveta.boronova@unipo.sk; Telefón: (+421)0517570641; Adresa: Ul. 17. novembra 1, 081 16 Prešov

Co-guarantors:

Assoc. Prof. RNDr. Eva Petrejčíková, PhD.; docent; E-mail: eva.petrejckikova@unipo.sk; Telefón: (+421)0517570398; Adresa: Ul. 17. novembra 1, 081 16 Prešov

Assoc. Prof. Ing. Jozef Fejér, PhD.; docent; E-mail: jozef.fejer@unipo.sk; Telefón: (+421)0517570312; Adresa: Ul. 17. novembra 1, 081 16 Prešov

Assoc. Prof. RNDr. Vincent Sedlák, PhD.; docent; E-mail: vincent.sedlak@unipo.sk; Telefón: (+421)0517570358; Adresa: Ul. 17. novembra 1, 081 16 Prešov

Assoc. Prof. MVDr. Soňa Mačková, PhD.; docent; E-mail: sona.macekova@unipo.sk; Telefón: (+421)0517570362; Adresa: Ul. 17. novembra 1, 081 16 Prešov

- b) List of persons responsible for the profile courses of the study programme with the assignment to the course and provided with a link to the central Register of university staff and with contact details (they may also be listed in the study plan).

Person contact	Profile courses	Link to Register of University Staff
RSP – Biology		
prof. MVDr. Janka Poráčová, PhD., MBA Email: janka.poracova@unipo.sk Phone: (+421)0517570309 Address: Ul. 17. novembra 1 081 16 Prešov	Genetics Biochemistry Animal and Human Physiology Evolutionary Biology	https://www.portalvs.sk/regzam/detail/6513
Assoc. Prof. RNDr. Iveta Boroňová, PhD. Email: iveta.boronova@unipo.sk Phone: (+421)0517570641 Address: Ul. 17. novembra 1 081 16 Prešov	Cytology Bachelor thesis defence Biology	https://www.portalvs.sk/regzam/detail/6470
Assoc. Prof. RNDr. Marta Mydlárová Blaščáková, PhD. Email: marta.blascakova@unipo.sk Phone: (+421)0517570398 Address: Ul. 17. novembra 1 081 16 Prešov	Microbiology Genetics Fundamentals of Biophysics	https://www.portalvs.sk/regzam/detail/19318
Assoc. Prof. RNDr. Marta Mydlárová Blaščáková, PhD. Email: marta.blascakova@unipo.sk Phone: (+421)0517570398 Address: Ul. 17. novembra 1 081 16 Prešov	Molecular biology 1 Human Embryology	https://www.portalvs.sk/regzam/detail/6301
Assoc. Prof. RNDr. Vincent Sedlák, PhD. Email: vincent.sedlak@unipo.sk Phone: (+421)0517570358 Address: Ul. 17. novembra 1 081 16 Prešov	General botany Animal and human physiology Pathobiochemistry	https://www.portalvs.sk/regzam/detail/21628
Assoc. Prof. MVDr. Soňa Mačková, PhD. Email: sona.macekova@unipo.sk Phone: (+421)0517570362 Address: Ul. 17. novembra 1 081 16 Prešov	Zoology 2 Morphology of animals	https://www.portalvs.sk/regzam/detail/6561
Assoc. Prof. Mgr. Peter Manko, PhD. Email: peter.manko@unipo.sk Phone: (+421)0517570608 Address: Ul. 17. novembra 1 081 16 Prešov	Zoology 1 Field practicum in botany and zoology	https://www.portalvs.sk/regzam/detail/6510
Assoc. Prof. Ruslan Mariychuk, CSc. Email: ruslan.mariychuk@unipo.sk Phone: (+421)0517570662 Address: Ul. 17. novembra 1	General and inorganic chemistry Organic Chemistry Plant physiology	https://www.portalvs.sk/regzam/detail/20408

The outline description of the study programme is used to process Annex 2 of the application for granting the accreditation of the study programme.

081 16 Prešov		
Assoc. Prof. Ing. Jozef Fejér, PhD. Email: jozef.fejer@unipo.sk Phone: (+421)0517570662 Address: Ul. 17. novembra 1 081 16 Prešov	Botanics 2	https://www.portalvs.sk/regzam/detail/20408
prof. RNDr. Ivan Šalamon, CSc., MBA Email: ivan.salamon@unipo.sk Phone: (+421)0517570662 Address: Ul. 17. novembra 1 081 16 Prešov	Botanics 1	https://www.portalvs.sk/regzam/detail/6530
Assoc. Prof. Mgr. Ján Brajerčík, PhD. E-mail: jan.brajercik@unipo.sk Phone: (+421)0517570317 Address: Ul. 17. novembra 1 081 16 Prešov	Mathematics for biologists Fundamentals of research and biostatistics	https://www.portalvs.sk/regzam/detail/6482

c) Reference to the research/art/teacher profiles of persons responsible for the profile courses of the study programme.

prof. MVDr. Janka Poráčová, PhD., MBA - <https://www.unipo.sk/fakulta-humanitnych-prirodných-vied/katedry/biologia-NEW/clenoviakatedry/Poracova/>
 Assoc. Prof. RNDr. Iveta Boroňová, PhD. - <https://www.unipo.sk/fakulta-humanitnych-prirodných-vied/katedry/biologia-NEW/clenoviakatedry/Boronova/>
 Assoc. Prof. RNDr. Marta Mydlárová Blaščáková, PhD. - <https://www.unipo.sk/fakulta-humanitnych-prirodných-vied/katedry/biologia-NEW/clenoviakatedry/Mydlarovablasckova/>
 Assoc. Prof. RNDr. Eva Petrejčíková, PhD. - <https://www.unipo.sk/fakulta-humanitnych-prirodných-vied/katedry/biologia-NEW/clenoviakatedry/Petrejckikova/>
 Assoc. Prof. RNDr. Vincent Sedlák, PhD. - <https://www.unipo.sk/fakulta-humanitnych-prirodných-vied/katedry/biologia-NEW/clenoviakatedry/sedlakvincent/>
 Assoc. Prof. MVDr. Soňa Mačeková, PhD. - <https://www.unipo.sk/fakulta-humanitnych-prirodných-vied/katedry/biologia-NEW/clenoviakatedry/Macekova/>
 prof. PaedDr. Ján Koščo, PhD. – <https://www.unipo.sk/fakulta-humanitnych-prirodných-vied/katedry/ekologia-new/kontakty/kosco/>
 Assoc. Prof. Mgr. Peter Manko, PhD. - <https://www.unipo.sk/fakulta-humanitnych-prirodných-vied/katedry/ekologia-new/kontakty/manko/>
 Assoc. Prof. Ruslan Mariychuk, CSc. - <https://www.unipo.sk/fakulta-humanitnych-prirodných-vied/katedry/ekologia-new/kontakty/mariychuk/>
 Assoc. Prof. Ing. Jozef Fejér, PhD. - <https://www.unipo.sk/fakulta-humanitnych-prirodných-vied/katedry/ekologia-new/kontakty/fejer/>
 prof. RNDr. Ivan Šalamon, CSc., MBA - <https://www.unipo.sk/fakulta-humanitnych-prirodných-vied/katedry/ekologia-new/kontakty/salamon/>
 Assoc. Prof. Mgr. Ján Brajerčík, PhD. - <https://www.unipo.sk/fakulta-humanitnych-prirodných-vied/katedry/kfmt-fhvp/matematika/ludia/jan-brajerici/>

d) List of teachers of the study programme with the assignment to the course and provided with a link to the central Register of university staff and with contact details (may be a part of the study plan).

Person contact	Profile courses	Link to Register of University Staff
RSP – Biology		
prof. MVDr. Janka Poráčová, PhD., MBA Email: janka.poracova@unipo.sk Phone: (+421)0517570309 Address: Ul. 17. novembra 1 081 16 Prešov	Genetics Animal and human physiology Evolutionary biology Biochemistry	https://www.portalvs.sk/regzam/detail/6513
Assoc. Prof. RNDr. Iveta Boroňová, PhD. Email: iveta.boronova@unipo.sk Phone: (+421)0517570641 Address: Ul. 17. novembra 1 081 16 Prešov	Cytology Bachelor thesis defence Biology Selected chapters from Cytology of plants and animals	https://www.portalvs.sk/regzam/detail/6470
Assoc. Prof. RNDr. Marta Mydlárová Blaščáková, PhD. Email: marta.blascakova@unipo.sk Phone: (+421)0517570398 Address: Ul. 17. novembra 1 081 16 Prešov	Microbiology Genetics Fundamentals of Biophysics Etology	https://www.portalvs.sk/regzam/detail/19318
Assoc. Prof. Eva Petrejčíková, PhD. Email: eva.petrejckikova@unipo.sk	Molecular biology 1 Human Embryology	https://www.portalvs.sk/regzam/detail/6301

The outline description of the study programme is used to process Annex 2 of the application for granting the accreditation of the study programme.

Phone: (+421)0517570398 Adress: Ul. 17. novembra 1 081 16 Prešov	Human developmental biology	
Assoc. Prof. RNDr. Vincent Sedlák, PhD. Email: vincent.sedlak@unipo.sk Phone: (+421)0517570358 Adress: Ul. 17. novembra 1 081 16 Prešov	General botany Animal and human physiology Pathobiochemistry Selected chapters in anatomy, morphology and ecotoxicology of plants	https://www.portalvs.sk/regzam/detail/21628
Assoc. Prof. RNDr. Dana Dojčáková, PhD. Email: dana.dojckova@unipo.sk Phone: (+421)0517570362 Adress: Ul. 17. novembra 1 081 16 Prešov	Seminar for bachelor thesis 1 Seminar for bachelor thesis 2	https://www.portalvs.sk/regzam/detail/6701
Assoc. Prof. MVDr. Soňa Mačeková, PhD. Email: sona.macekova@unipo.sk Phone: (+421)0517570362 Adress: Ul. 17. novembra 1 081 16 Prešov	Histology Human Biology Laboratory investigation methods Infectious diseases Fundamentals of Biological Research and Bioethics 1	https://www.portalvs.sk/regzam/detail/6834
RNDr. Michaela Zígová, PhD. Email: michaela.zigova@unipo.sk Phone: (+421)0517570358 Adress: Ul. 17. novembra 1 081 16 Prešov	General botany History of Biology Model organisms Selected chapters in plant anatomy, morphology and ecotoxicology Fundamentals of Biological Research and Bioethics 1	https://www.portalvs.sk/regzam/detail/27052
RNDr. Alexander Csanády, PhD. Email: alexander.csanady@unipo.sk Phone: (+421)0517570358 Adress: Ul. 17. novembra 1 081 16 Prešov	Morphology of animals Ethology	https://www.portalvs.sk/regzam/detail/14690
PaedDr. Silvia Duranková, PhD. Email: silvia.durankova@unipo.sk Phone: (+421)0517570358 Adress: Ul. 17. novembra 1 081 16 Prešov	Cytology Human developmental biology Fundamentals of biophysics Nutrition and human health	https://www.portalvs.sk/regzam/detail/24500
RNDr. Mária Konečná, PhD. Email: maria.konecna@unipo.sk Phone: (+421)0517570358 Adress: Ul. 17. novembra 1 081 16 Prešov	Animal and human physiology Biochemistry Evolutionary Biology Pathobiochemistry	https://www.portalvs.sk/regzam/detail/29466
Mgr. Andrea Babejová, PhD. Email: andrea.babejova@unipo.sk Phone: (+421)0517570358 Adress: Ul. 17. novembra 1 081 16 Prešov	Molecular biology 1 Human Embryology Laboratory methods of investigation	https://www.portalvs.sk/regzam/detail/36608
RNDr. Jana Gaľová, PhD. Email: jana.galova@unipo.sk Phone: (+421)0517570358 Adress: Ul. 17. novembra 1 081 16 Prešov	Selected chapters from cytology of plants and animals	https://www.portalvs.sk/regzam/detail/25774
Assoc. Prof. Ruslan Mariychuk, CSc. Email: ruslan.mariychuk@unipo.sk Phone: (+421)0517570662 Adress: Ul. 17. novembra 1 081 16 Prešov	General and inorganic chemistry Organic Chemistry Analytical chemistry Plant physiology	https://www.portalvs.sk/regzam/detail/20408
Assoc. Prof. Ing. Jozef Fejér, PhD. Email: jozef.fejer@unipo.sk Phone: (+421)0517570662 Adress: Ul. 17. novembra 1 081 16 Prešov	Botanics 2	https://www.portalvs.sk/regzam/detail/20408
prof. RNDr. Ivan Šalamon, CSc., MBA Email: ivan.salamon@unipo.sk Phone: (+421)0517570662 Adress: Ul. 17. novembra 1 081 16 Prešov	Botanics 1	https://www.portalvs.sk/regzam/detail/6530

The outline description of the study programme is used to process Annex 2 of the application for granting the accreditation of the study programme.

prof. PaedDr. Ján Koščo, PhD. Email: jan.kosco@unipo.sk Phone: (+421)0517570611 Address: Ul. 17. novembra 1 081 16 Prešov	Zoology 2 Morphology of animals	https://www.portalvs.sk/regzam/detail/6561
Assoc. Prof. Mgr. Peter Manko, PhD. Email: peter.manko@unipo.sk Phone: (+421)0517570608 Address: Ul. 17. novembra 1 081 16 Prešov	Zoology 1 Field practicum in botany and zoology	https://www.portalvs.sk/regzam/detail/6510
RNDr. Daniela Gruľová, PhD. Email: daniela.grulova@unipo.sk Phone: (+421)0517570358 Address: Ul. 17. novembra 1 081 16 Prešov	Plant physiology Field practicum in botany and zoology Analytical chemistry	https://www.portalvs.sk/regzam/detail/19319
RNDr. Adriana Eliášová, PhD. Email: adriana.eliasova@unipo.sk Phone: (+421)0517570358 Address: Ul. 17. novembra 1 081 16 Prešov	Botany 2 Analytical chemistry	https://www.portalvs.sk/regzam/detail/6222

RNDr. Romana Smolková, PhD. Email: romana.smolkova@unipo.sk Phone: (+421)0517570325 Address: Ul. 17. novembra 1 081 16 Prešov	General and inorganic chemistry Organic Chemistry Analytical chemistry	https://www.portalvs.sk/regzam/detail/29468
Mgr. Lucia Hartmannová, PhD. Email: lucia.hartmannova@unipo.sk Phone: (+421)0517563176 Address: Ul. 17. novembra 1 081 16 Prešov	English language 1 English language 2 English language 3 English language 4	https://www.portalvs.sk/regzam/detail/21641
Mgr. Slávka Oriňáková, PhD. E-mail: slavka.orinakova@unipo.sk Phone: (+421)0517563165 Address: Ul. 17. novembra 1 081 16 Prešov	Latin language 1 Latin language 2 Latin terminology 1 Latin terminology 2	https://www.portalvs.sk/regzam/detail/6720
Assoc. Prof. Mgr. Ján Brajerčík, PhD. E-mail: jan.brajercik@unipo.sk Phone: (+421)0517570317 Address: Ul. 17. novembra 1 081 16 Prešov	Mathematics for biologists Fundamentals of research and biostatistics	https://www.portalvs.sk/regzam/detail/6482
Mgr. Mária Majherová, PhD. E-mail: maria.majherova@unipo.sk Phone: (+421)0517570316 Address: Ul. 17. novembra 1 081 16 Prešov	Fundamentals of research and biostatistics	https://www.portalvs.sk/regzam/detail/6523
Ing. Oleg Tkáč, PhD. E-mail: oleg.tkac@unipo.sk Phone: (+421)0517563161 Address: Ul. 17. novembra 1 081 16 Prešov	Information and communication technologies for biologists	https://www.portalvs.sk/regzam/detail/6538

e) List of the supervisors of final theses with the assignment to topics (indicating the contact details).

prof. MVDr. Janka Poráčová, PhD., MBA; Email: janka.poracova@unipo.sk; Phone: (+421)0517570309; Address: Ul. 17. novembra 1, 081 16 Prešov

Defended final bachelor theses since the academic year 2015/2016:

Prenatal non-invasive diagnostics (Monika Miklošová)

Biochemical and haematological aspects of cardiological diseases (Gabriela Opettová)

The outline description of the study programme is used to process Annex 2 of the application for granting the accreditation of the study programme.

Etiopathogenesis, occurrence, diagnosis and therapy of selected venereal diseases in women (Ivan Pačuta)
Etiopathogenesis and diagnosis of polycystic dysplasia (Alena Jenčová)
Biochemical and molecular genetic aspects of thyroid disease (Mária Jenčová)
Specific markers and their association with the development of metabolic syndrome (Lucia Mikitová)

Planned final thesis topics:
DNA identification analysis in twins
Diagnostic possibilities of COVID-19 using molecular biological methods
Methods and techniques in genetic engineering

Assoc. Prof. RNDr. Iveta Boroňová, PhD.; Email: iveta.borňová@unipo.sk; Phone: (+421)0517570641; Address: Ul. 17. novembra 1, 081 16 Prešov

Defended final bachelor theses since the academic year 2015/2016:
Risk factors for cardiomyopathies
The importance of cytogenetics in clinical diagnosis
Genetic factors influencing the development of osteoporosis

Planned final thesis topics:
Cytogenetic markers involved in the etiopathogenesis of fertility disorders
Prognostically relevant oncocytogenetic markers useful in clinical practice
Analysis of bone markers in relation to complications of osteoporosis

Assoc. Prof. RNDr. Marta Mydlárová Blaščáková, PhD.; Email: marta.blascakova@unipo.sk; Phone: (+421)0517570398; Address: Ul. 17. novembra 1, 081 16 Prešov

Defended final bachelor theses since the academic year 2015/2016:
Biochemical markers of osteoarthritis (Viktória Sjanská)
The importance of selected biochemical markers of cardiac diseases with a focus on cardiomyopathies (Igor Palčo)
Selected bacteraemias associated with sepsis (Michaela Komáromyová)
Biochemical significance of hormones in the diagnosis of hypothyroidism (Barbora Kilarova)
Biochemical markers of ischemic heart disease (Daniel Buša)
Vibrio cholerae as a human pathogen and natural inhibitor of the aquatic environment (Tomáš Suško)
Etiopathogenesis and biochemical markers in the diagnosis of osteoporosis (Gabriela Ničová)
Maternal and fetal blood group incompatibility (Lenka Mitrová)
Etiopathogenesis and glycaemic profile in the diagnosis of diabetes mellitus (Miroslava Čipkalová)

Planned final thesis topics:
The leptin gene and its important role in weight control and bone remodelling
Methods for the evaluation of antimicrobial activity in vitro
Virulence factors of uropathogenic Escherichia coli in the development of urinary tract infection and renal damage

Assoc. Prof. RNDr. Eva Petrejčíková, PhD.; Email: eva.petrejckova@unipo.sk; Phone: (+421)0517570398; Address: Ul. 17. novembra 1, 081 16 Prešov

Defended final bachelor theses since the academic year 2015/2016:
Etiopathogenetic aspects of psoriasis (Kristína Krajňáková)
Molecular-genetic mechanisms of eye colour (Sonia Chomová)
Sudden cardiac death in young people and athletes (Aneta Balascakova)
Biological teratogens causing congenital developmental defects (Andrea Horvatova)

Planned final thesis topics:
Health risks and consequences of tattooing
The importance of odorology in the identification of persons
Archaic DNA and the determination of paternal and maternal lineages

Assoc. Prof. RNDr. Vincent Sedlák, PhD.; Email: vincent.sedlak@unipo.sk; Phone: (+421)0517570358; Address: Ul. 17. novembra 1; 081 16 Prešov

Defended final bachelor theses since the academic year 2015/2016:
Bioactive substances of Camellia sinensis (L.) Kuntze and their biological effects (Juraj Markuš)
Possibilities of biological application of dermatoglyphic analysis of papillary lineages (Simona Labaničová)
Selected diseases caused by insect bites (Viktória Kurucová)
Metabolic syndrome (Kristína Bačová)
Ecophysiology of substance excretion (Zuzana Midová)
Protective antiradical activity of Aronia melanocarpa (Michx.) Elliott and Vaccinium myrtillus L. extracts (Zuzana Gogalova)
Antioxidant activity of Vitis vinifera L., Sambucus nigra L. and their influence on human health (Jana Ondeková)
Biological effects of anthocyanins of selected plant species (Lucia Kovaľová)
Stress markers in selected livestock species (Jana Považanová)

Planned final thesis topics:
Aplikácia biometrie očnej dúhovky človeka

The outline description of the study programme is used to process Annex 2 of the application for granting the accreditation of the study programme.

Analýza dermatoglyfických vzorov papilárnych línií človeka
Biologická aktivita sekundárnych metabolitov invázných rastlín

Assoc. Prof. MVDr. Soňa Mačeková, PhD.; Email: sona.macekova@unipo.sk; Phone: (+421)0517570362; Address: Ul. 17. novembra 1, 081 16 Prešov

Defended final bachelor theses since the academic year 2015/2016:
Sleep patterns as a risk factor for obesity in university students (Jana Tomková)
Characteristics and etiopathogenesis of obesity (Miriama Šľebodová)
Roma people (Petra Gerželová)
Characteristics of the MC4R gene and analysis of its single nucleotide polymorphism in relation to obesity (Ľubomíra Jurčišinová)
Characteristics of Roma (Stanislava Tkáčová)
Roma population in Slovakia (Dorota Ondrušková)
Characteristics of selected alimentary infections (Slavomíra Marfiaková)
Ovarian diseases (Petra Sabová)
Etiopathogenesis of obesity with a focus on the influence of MC4R gene polymorphisms (Mária Ryníková)
Compulsory vaccination in Slovakia (Karol Marcinko)
Serious vector-borne infectious diseases (Martina Berczová)
Rare diseases in the Roma population (Natália Ťažká)
Covid 19 (Natália Demesh)
Infectious diseases: SARS, MERS and Covid 19 (Daniella Dekha)

Planned final thesis topics:
Charakteristika vybraných genetických polymorfizmov vo vzťahu k obezite
Infekčné a invázne ochorenia na Slovensku
Molekulárne metódy v diagnostike komplexných ochorení

RNDr. Alexander Csanády, PhD.; Email: alexander.csanady@unipo.sk; Phone: (+421)0517570358; Address: Ul. 17. novembra 1, 081 16 Prešov

Defended final bachelor theses since the academic year 2015/2016:
Cataloguing and somatometric evaluation of the collections of the Šariš Museum in Bardejov - order Carnivora
Morphometric analysis of pelvic bones of selected species of the genus Mus (Rodentia) from Slovakia
Morphometric analysis of scapular bones of selected species of the genus Mus (Rodentia) from Slovakia

RNDr. Michaela Zigová, PhD.; Email: michaela.zigova@unipo.sk; Phone: (+421)0517570358; Address: Ul. 17. novembra 1, 081 16 Prešov

Defended final bachelor theses since the academic year 2015/2016:
Sudden cardiac death in patients with cardiomyopathies (Ivana Dorinová)
Regional and ethnic differences in patients with heart failure (Antónia Solárová)
Genetic determinants of sudden cardiac death (Zuzana Pačanská)
Age-dependent changes in pharmacokinetic processes (Dominika Vallušová)
Genetic determination of pigmentation (Terézia Haňová)
Rare genetically determined diseases (Radka Jelová)
Nutritional aspects and sex-dependent disorders (Alica Brodová)
Medicinal plants and their active substances in cardiology (Nikola Vargova)

Planned final thesis topics:
Approaches in the treatment of atrial fibrillation
The importance and potential of screening and diagnostic tests
Risk factors in the biology laboratory work environment and their impact on health

PaedDr. Silvia Duranková, PhD.; Email: silvia.durankova@unipo.sk; Phone: (+421)0517570358; Address: Ul. 17. novembra 1, 081 16 Prešov

Defended final bachelor theses since the academic year 2015/2016:
Anthropological characteristics of children of younger school age from Stropkov district (Gonosova Jana)
Anthropological characteristics of preschool children from Stropkov district (Andrejková Sabína)

Planned final thesis topics:
Anthropometric characteristics of newborns
Anthropometric characteristics of preschool children
Selected head measurements of the adult population

RNDr. Mária Konečná, PhD.; Email: maria.konecna@unipo.sk; Phone: (+421)0517570358; Address: Ul. 17. novembra 1, 081 16 Prešov

Defended final bachelor theses since the academic year 2015/2016:
Causes of male infertility (Jakub Lipiner)
Influence of environmental factors on the process of carcinogenesis (Feketeová Katarína)
Lipid profile in patients diagnosed with systemic arterial hypertension (Nikola Sochová)
Influence of polymorphisms as one of the possible causes of male infertility (Vereshchakova Lubica)
Genetic analysis of patients with fertility disorders (Yildiz Meryem)

The outline description of the study programme is used to process Annex 2 of the application for granting the accreditation of the study programme.

Huntington's disease (Miškárová Simona)
Stress and its physiological basis (Jurenková Katarína)
Influence of exogenous and endogenous factors on haematological and biochemical parameters of wild boar (Dundovičová Andrea)

Planned final thesis topics:
Change in haematological parameters in patients with leukaemia
Liver and selected liver diseases
Osteoarthritis and its complications

Mgr. Andrea Babejová, PhD.; Email: andrea.babejova@unipo.sk; Phone: (+421)0517570358; Address: Ul. 17. novembra 1, 081 16 Prešov

Defended final bachelor theses since the academic year 2015/2016:
Candidate osteoporosis genes (Marta Rudášová)
Endocrine disorders and osteoporosis (Michaela Mihaľová)
Principles of healthy nutrition at different periods of individual development and its alternative ways (Figelova Miroslava)

Planned final thesis topics:
Epigenetic processes in tumour tissue
Genetically modified crops
Obesity and Covid 19

RNDr. Jana Gaľová, PhD.; Email: jana.galova@unipo.sk; Phone: (+421)0517570358; Address: Ul. 17. novembra 1, 081 16 Prešov

Defended final bachelor theses since the academic year 2015/2016:
Infections caused by Escherichia coli (Nikola Užáková)
Angelman syndrome (Jana Duračková)
Factors affecting human reproductive health (Denisa Morkovcova)

Planned final thesis topics:
Methods of estimating body height on skeletal material
Neurological diseases
Degenerative and inflammatory diseases of the joints and spine

prof. RNDr. Jarmila Bernasovská, PhD., E-mail: jarmila.bernasovska@unipo.sk, Phone: (+421) 0517570369, Address: Ul. 17. novembra 1, 081 16 Prešov

Defended final bachelor theses since the academic year 2015/2016:
Physiological and genetic aspects of the regulation of food intake
Genetic and environmental factors associated with the development of dental caries

Planned final thesis topics:
Calorie restriction and intermittent fasting in the prevention of type 2 diabetes mellitus

RNDr. Daniela Grejtáková, PhD., E-mail: daniela.grejtakova@unipo.sk, Phone: (+421) 0517570358, Address: Ul. 17. novembra 1, 081 16 Prešov

Defended final bachelor theses since the academic year 2015/2016:
Use of molecular point-of-care (POC) testing COVID19
Genetic variants of PCSK9 and their significance in lipid metabolism
The role of novel hypolipidemics in the treatment of hypercholesterolaemia

f) Reference to the research/art/teacher profiles of the supervisors of final theses.

prof. MVDr. Janka Poráčková, PhD., MBA - <https://www.unipo.sk/fakulta-humanitnych-prirodnch-vied/katedry/biologia-NEW/clenoviakatedry/Poracova/>
prof. RNDr. Jarmila Bernasovská, PhD. - <https://www.unipo.sk/fakulta-humanitnych-prirodnch-vied/katedry/biologia-NEW/clenoviakatedry/Bernasovska/>
Assoc. Prof. RNDr. Iveta Boroňová, PhD. - <https://www.unipo.sk/fakulta-humanitnych-prirodnch-vied/katedry/biologia-NEW/clenoviakatedry/Boronova/>
Assoc. Prof. RNDr. Marta Mydlárová Blaščáková, PhD. - <https://www.unipo.sk/fakulta-humanitnych-prirodnch-vied/katedry/biologia-NEW/clenoviakatedry/MydlarovaBlastcakova/>
Assoc. Prof. RNDr. Eva Petrejčíková, PhD. - <https://www.unipo.sk/fakulta-humanitnych-prirodnch-vied/katedry/biologia-NEW/clenoviakatedry/Petrejcikova/>
Assoc. Prof. RNDr. Vincent Sedlák, PhD. - <https://www.unipo.sk/fakulta-humanitnych-prirodnch-vied/katedry/biologia-NEW/clenoviakatedry/sedlakvincent/>
Assoc. Prof. MVDr. Soňa Mačeková, PhD. - <https://www.unipo.sk/fakulta-humanitnych-prirodnch-vied/katedry/biologia-NEW/clenoviakatedry/Macekova/>
RNDr. Alexander Csanády, PhD. - <https://www.unipo.sk/fakulta-humanitnych-prirodnch-vied/katedry/biologia-NEW/clenoviakatedry/Csanady/>
RNDr. Michaela Zígová, PhD. - <https://www.unipo.sk/fakulta-humanitnych-prirodnch-vied/katedry/biologia-NEW/clenoviakatedry/Zigova/>

The outline description of the study programme is used to process Annex 2 of the application for granting the accreditation of the study programme.

PaedDr. Silvia Duranková, PhD. - <https://www.unipo.sk/fakulta-humanitnych-prirodnch-vied/katedry/biologia-NEW/clenoviakatedry/Durankova/>

RNDr. Mária Konečná, PhD. - <https://www.unipo.sk/fakulta-humanitnych-prirodnch-vied/Konecna/>

Mgr. Andrea Babejová, PhD. - <https://www.unipo.sk/fakulta-humanitnych-prirodnch-vied/katedry/biologia-NEW/clenoviakatedry/Babejova/>

RNDr. Jana Gaľová, PhD. - <https://www.unipo.sk/fakulta-humanitnych-prirodnch-vied/katedry/biologia-NEW/clenoviakatedry/Galova/>

RNDr. Daniela Grejtáková, PhD. - <https://www.unipo.sk/fakulta-humanitnych-prirodnch-vied/katedry/biologia-NEW/clenoviakatedry/Grejtakova/>

g) Student representatives representing the interests of students of the study programme (name and contact details).

Student part of the Academic Senate's representatives (AS FHNS UP)

Bc. Daniel Kamenský - daniel.kamensky@smail.unipo.sk

Mgr. Katarína Fogašová - katarina.fogasova@smail.unipo.sk

Mgr. Vladislava Košová - vladislava.kosova@smail.unipo.sk

Mgr. Monika Lörincová - monika.lorincova@smail.unipo.sk

Ing. Július Varga - julius.varga@smail.unipo.sk

Student part of the Academic Senate's representatives (AS UP, representative for FHNS)

Ing. Hedviga Vašková - hedviga.vaskova@smail.unipo.sk

Members of the Academic Senates represent the interests of students irrespective of their affiliation to the study programme.

h) Study advisor of the study programme (indicating contact details and information on the access to counseling and on the schedule of consultations).

Assoc. Prof. MVDr. Soňa Mačeková, PhD.; Email: sona.macekova@unipo.sk, Telefón: (+421)0517570362, Adresa: Ul. 17. novembra 1, 081 16 Prešov

List of study advisors at FHNS UP: <https://www.unipo.sk/fakulta-humanitnych-prirodnch-vied/vzdelavanie/informacie/poradcovia/>

i) Other supporting staff of the study programme – assigned study officer, career counselor, administration, accommodation department, etc. (with contact details).

RNDr. Štefan Koco, PhD., Vice-Dean for Education, Email: stefan.koco@unipo.sk, Phone: (+421)0517570603

Ing. Jana Kleščová, Study Department Officer, Phone: (+421)0517570620, Email: jana.klescova@unipo.sk

Mgr. Slavomíra Ondovčíková, Study Department Officer, Phone: (+421)0517570623, Email: slavomira.ondovcikova@unipo.sk

Mgr. Viktória Rybárová, Study Department Officer, Phone: (+421)0517570292, Email: viktoria.hovancova@unipo.sk

Assoc. Prof. RNDr. Marta Mydlárová Blaščáková, PhD., SP scheduler, Email: marta.blascakova@unipo.sk, Phone: (+421)0517570395

Ing. Miroslav Ganaj, Head of the Faculty Computer Centre, Phone: (+421)0517570610, Email: miroslav.ganaj@unipo.sk

Drahomíra Tomčáková, clerk, Email: drahomira.tomcakova@unipo.sk, Phone: (+421)0517570358

Ing. Peter Haľko, Director of the University Library, Phone: (+421)0517570144, Email: peter.halko@unipo.sk

Mgr. František Martinka, Director of Student Residence Hall, Email: frantisek.martinka@unipo.sk, Phone: (+421)0517725958

Mária Husárová, Accommodation Officer, Phone: (+421)05177 22 851, ext. 101, Email: maria.husarova@unipo.sk

8. Spatial, material, and technical equipment of the study programme and support

a) List and characteristics of the study programme classrooms and their technical equipment with the assignment to learning outcomes and courses (laboratories, design and art studios, studios, workshops, interpreting booths, clinics, priest seminaries, science and technology parks, technology incubators, school enterprises, practice centers, training schools, classroom-training facilities, sports halls, swimming pools, sports grounds).

Spatial equipment of the study programme

The Faculty of Humanities and Natural Sciences is located in the University Campus at 17. novembra Street 1, Prešov. The building was constructed in the 80's of the last centuries, but the premises are continuously repaired and reconstructed for the needs of individual study fields and faculties. The whole building complex consists of five interconnected parts, in which lecture halls, lecture rooms and professional workplaces are situated. The building also houses laboratories and centres of excellence for science and research. The building provides all the activities necessary to ensure quality teaching of the SP Biology.

Well-equipped classrooms and laboratories are designed for students' study and professional activities. Not only the theoretical and practical teaching of individual subjects takes place in them, but students have the opportunity to carry out their final theses and acquire the necessary experience and skills needed for their further application in professional life. All workplaces and all classrooms are connected to the university network, special software is available (statistical software, e-learning systems, internet media, resources to enable the disabled to participate in the regular teaching process).

Material and technical support of the study programme

Since 2008, the University of Prešov has undergone extensive modernization of classrooms. New equipment has been installed in a total of 165 seminar, lecture and specialized classrooms. These included 136 computers for lecture and seminar rooms, 406 computers for computer and specialized classrooms, 132 data projectors and electric screens, 17 interactive whiteboards and other small equipment. In 2020, 25 of the largest classrooms of the university were further upgraded, ICT equipment and video-presentation technology were upgraded.

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Since 2008, within the framework of projects from state funds, modern metallic and fiber-optic computer wiring has been installed and expanded in 14 buildings of the university, including the initial wiring in the rooms of the students accommodated in the Student Halls of Residence and Canteen.

A total of 1 694 computer sockets were installed. All buildings have high-speed networks, which typically operate at 1 Gbit/s, but are also ready for the future upgrade to 10 Gbit/s.

Between 2017 and 2020, the University underwent a complete replacement and upgrade of the centrally managed WiFi network at a cost of €154,000, with a total of 298 new access points installed in all buildings. In 2020, 25 of the largest classrooms at the university were further upgraded, and ICT equipment and video-presentation technology were upgraded.

The scientific and pedagogical workplace of the Department of Biology, as well as the Centre of Excellence for Animal and Human Ecology, has extensive technical equipment, which, within the framework of the School of Biology, serves primarily for teaching and scientific research activities of students and staff. Several specialised facilities are used for educational activities. The above-standard equipment provides conditions for quality training of students in the single-discipline Bachelor's degree programme in biology.

The Department of Biology has the following facilities:

- Laboratory of Human Molecular Ecology I (no. 216) and Laboratory of Human Molecular Ecology II (m. no. 217)
- Laboratory of Molecular Genetics I (no. 218) and Laboratory of Molecular Genetics II (m. no. 219A)
- Laboratory of Animal and Human Physiology (219B)
- Laboratory of Cytogenetics (no. 212)
- Laboratory of Animal and Plant Ecophysiology (no. 224)
- Laboratory of Sequence Analysis II (no. 516/1, 516/2)
- Laboratory of Environmental Biotechnology I (no. 516/6) and Laboratory of Environmental Biotechnology II (m. no. 516/7)
- Laboratory of Animal Biodiversity (no. 516/8)
- Laboratory of eco-chemical disciplines (no. 229)
- Lecture and seminar rooms (. no. 219B, 226, 227A)
- Lecture and seminar rooms of the Faculty of Humanities and Natural Sciences of UP (97, 100, 238, 239)

The laboratories and premises of the Department of Biology have internet access and the following equipment:

1. Lecture and seminar room (no. 226) - teaching lectures and seminars of compulsory and compulsory optional courses of the study programme. The room has computer ICT equipment (11 PC sets for the teacher and students), microscopy equipment (7 microscopes for practical teaching), various teaching aids and three-dimensional models, an interactive whiteboard, a data projector and a projection screen, which are used in the educational process of the courses: Human Biology, Zoology 1, Zoology 2, Animal Morphology, Botany 1, Botany 2, General Botany, Histology (with a capacity of 25 students). From the software point of view, the classroom meets the requirements for teaching, the network operating system Windows XP managed by the server is installed on the PC, the computers are connected to the Internet.
2. Seminar room (no. 219B) - teaching of seminars and exercises of compulsory and compulsory optional courses of the study programme. The room is equipped with computer ICT technology, microscopy equipment (8 microscopes for practical teaching), a data projector and a projection screen, which are used in the educational process of Microbiology, Plant Physiology, Botany 2 (with a capacity of 10 students). From the software point of view, the classroom meets the requirements for teaching, the network operating system Windows XP managed by the server is installed on the PC, the computers are connected to the Internet.
3. Lecture and seminar room 227A - teaching of lectures and seminars of compulsory and compulsory optional courses of the study programme. The room is equipped with computer equipment (PC set, data projector). From the software point of view, the classroom meets the requirements for teaching, the network operating system Windows XP managed by the server is installed on the PC, the computers are connected to the Internet. The room is used in the educational process in teaching the subjects Selected chapters of cytology of plants and animals, Genetics, Human ecology.
4. Lecture and seminar rooms of the Faculty of Humanities and Natural Sciences of UP (97, 100, 238, 239) - teaching of lectures and seminars of compulsory and compulsory optional courses of the study programme. The rooms (with a capacity of 50 and 100 students, respectively) have computer ICT equipment, data projector, which are used in the educational process of courses where the capacity of students exceeds the capacity of the rooms of the Department of Biology. From the software point of view, the classroom meets the requirements set for teaching, the PC is installed on the network operating system Windows XP managed by the server, the computers are connected to the Internet.
5. Real Time PCR - Roche Light Cycler 480 (Roche), Open array Real Time (Applied Biosystems); RealTimePCR - Rotor Gene 6000 Corbett, with HRM function, Vertical Laminar Box Airstream II AC2, Flow UV Decontaminator UVR-M. The room is used in the educational process for research activities of students in the final bachelor thesis.
6. Laboratory of Human Molecular Ecology II (no. 217) - Instrumentation: filtration equipment for water treatment Direct- Q MILLIPORE; 7500 Fast Real-Time PCR System (Applied Biosystems); Thermocycler Bioterna T personal, Thermocycler Biometra T personal combi, Thermocycler Biometra T personal Basic Gradient, Biometra ABI 2720, Centrifuge Thermo B4i multifunction, UVR-M UVR decontaminator flow-through. From the software point of view, the classroom meets the requirements for teaching, the network operating system Windows XP managed by the server is installed on the PC, the computers are connected to the Internet. The room is used in the educational process in the teaching of Genetics, Model organisms, Selected chapters of biophysics and in the research activities of students in the final bachelor thesis (with a capacity of 16 students).
7. Laboratory of Molecular Genetics I (no. 218) - Instrumentation: genetic analyzer MegaBace 1000 (Amersham); Automatic pipetting device epMotion (Eppendorf), Centrifuge Universal 320 Hettich. Laboratory instruments are hardware and software equipped including PC. The room is used in the educational process for research activities of students in the framework of final bachelor theses.
8. Laboratory of Molecular Genetics II (no. 219A) - Instrumentation: spectrophotometric analyzer Nanodrop 2000; Analytical balance SCALTEC SBC 33 (0,01g - 65g); Horizontal electrophoresis Owl DE-O2, Autoclave 2540EL, Vertical electrophoresis - Owl Separation Systems, model No V20 - CDC, UV transilluminator, Centrifuge MIKRO 200R, Flow-through UV decontaminator. Laboratory instruments are hardware and software equipped including PC.
9. Laboratory of Ecophysiology of Animals and Plants (no. 224) - L Instrumentation: C/MS -modular system - liquid chromatograph with detection system; MS, PDA, fluorescence detector; GC/MS-modular system-combination of GC gas chromatograph with mass quadrupole detector with EI; complex system for measuring photosynthesis, automatic micromanipulator for separation of animal and human cells; distillation and extraction apparatus for the preparation of plant essential oils and extracts; rotary vacuum

- evaporator; drying room for laboratory glassware and plant materials; fume hood for handling volatile material; water bath for maintaining stable reaction temperatures. The room is used in the educational process in the research activities of students in the final bachelor theses in the areas of Plant Physiology and Botany 1, 2.
10. Sequencing Analysis Laboratory II (no. 516/1, 516/2) - Instrumentation: Solid 5500xl DNA sequencing system (Applied Biosystems), ABI PRISM 3500 Genetic Analyzer, ABI PRISM 3500xl Genetic Analyzer, Step One Real-Time PCR System (Applied Biosystems). The rooms are equipped with computer equipment (PC set, data projector), microscopy equipment (10 microscopes for practical training). From the software point of view, the classroom meets the requirements for teaching, a Windows XP network operating system managed by a server is installed on the PC, the computers are connected to the Internet. The rooms are used in the educational process in the teaching of Cytology, Histology, Evolutionary Biology, Ethology and in the research activities of the students in the framework of the final bachelor's theses (with a capacity of 16 students).
 11. Laboratory of Environmental Biotechnology I (no. 516/6) - Instrumentation: atomic absorption spectrometer AA-7000 (Shimadzu). The room is used in the educational process during the research activities of students in the framework of their final bachelor theses.
 12. Laboratory of Environmental Biotechnology II (no. 516/7) - Instrumentation: Fully automatic immunochemical analyzer COBAS e 411 (ROCHE); Combined analyzer for clinical biochemistry COBAS INTEGRA 400 plus system (ROCHE); Vertical laminar box Airstream Esco Class II, Water bath BWT-U; Elisa reader-Ledetec 96 Microplate; Spectrophotometer VWR-UV 1600PC, Osmotic filtration device, Centurion K2R refrigerated centrifuge, Vortex Multispin centrifuge, Flow-through UV decontaminator. The room is used in the educational process in the teaching of the subjects Biochemistry, Animal and Human Physiology and in the research activities of students in the final bachelor theses.
 13. Laminar box Thermo-Scientific MSC-Advantage. The room is used in the educational process during the research activities of students in the framework of their final bachelor theses.
 14. Laboratory of Cytogenetics no. 212) - Instrumentation: flow cytometer NAVIOS (Beckman Coulter), Biochemical analyzer Dimension Xpand Plus (Siemens); Hematology analyzer (Beckman Coulter); Fluorescence microscope DM4000 (Leica Microsystems); Fluorescence microscope Olympus IX71, Biological microscope Olympus BX53, Thermostat Gemmy IN-010-16 Lab incubator. Laboratory instruments are hardware and software equipped including PC. The room is used in the educational process during the teaching of exercises in the subject Cytology and during the research activities of students in the final bachelor's theses.
 15. Laboratory of Animal Biodiversity (no. 516/8) - Instrumentation: fully automated stereomicroscope, microscope with accessories DM4000B TL, Turbidimeter, Analyser - UV-VIS spectrophotometer, Oximeter, microprocessor pHmeter, Hydrometric wing FP101, water analyser. The room is used in the educational process in the teaching of exercises in the subjects General Zoology, Zoology I, Zoology II and in the research activities of students in the framework of the final bachelor's theses.
 16. Laboratory of eco-chemical disciplines (no. 229) - instrumentation and material equipment: laboratory glassware, laboratory aids for chemical and biochemical experiments, distillation apparatus, thermostat, spectrophotometer, analytical balance, fume hood, incubator, water bath, pH-meter. The room is used in the educational process in teaching exercises from the subjects General and Inorganic Chemistry, Organic Chemistry, Biochemistry and Animal and Human Physiology.

Material, spatial and information equipment belonging to the scientific-pedagogical workplace - Department of Biology FHNS UP in Prešov, has been long term and purposefully built and currently serves for teaching and scientific-research activities in the framework of the study programme Biology.

Information about the Material, spatial and information equipment of the Department of Biology and the Centre of Excellence in Animal and Human Ecology of FHNS UP is available at:

<https://www.unipo.sk/fakulta-humanitnych-prirodnch-vied/katedry/biologia/>
<https://www.unipo.sk/ceezc/>

- b) Characteristics of information provision of the study programme (access to study literature according to course information sheets, access to information databases and other information resources, information technologies, etc.).

All students have the opportunity to access the study literature available in the UP University Library. The University Library is a scientific-information, bibliographic, coordination and advisory workplace of the University, which provides comprehensive library and information services primarily to students and employees of the University and, within its capabilities, to other professional public. The University Library has three main workplaces. For the students of the FHNS is mainly the Central Library (UK1), which is located directly in the main building of the University on ul. The department provides the following basic and special library and information services: lending services, bibliographic and information services, consultancy services, reprographic services and other services (processing of records of the publication activity of the university staff; bibliographic registration of final and qualification theses; operation of the Digital Library of the CU UP; organisation of exhibitions of scientific literature, exhibitions of works of art, concerts, presentations, professional library events, etc.). The library collection contains more than 300 000 library units. Since 1997, CU UP has been building a database of UP publishing activities, which registers more than 67 000 documents. Since 2004, the library has been building the Digital Library - a database of electronic full-text documents created by the university staff, which contains 916 publications. The library provides access to paid full-text database centres such as EBSCO, Wiley, Knovel, ProQuest, Science Direct, Scopus, Springer, Taylor and Francis, Web of Science, and others. There are 303 study places available in 6 study rooms (2 of which are database rooms). Over 70,000 readers visit the library each year and over 500,000 visit the library's website. The library has its own computer network (PULIBnet) with 4 servers, 84 computers, of which 45 computers are reserved for users. Annually it publishes a bibliography of UP's publishing activity. The total area of the library is 2 643 m², of which 1 136 m² is reserved for users.

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All workplaces and all classrooms of FHNS are connected to the university network. The faculty has a newly built computer network based on manageable switches with a speed of 1Gbit/s, new structured UTP cabling allows the transition to speed up to 10 Gbit/s. All classrooms are equipped with a data projector, an electric screen and a computer connected to the computer network, classroom computers are centrally managed, the computing centre is equipped with new powerful servers. The created technical conditions enable the use of modern information technologies by the staff and students of FHNS. Students have to log in to the faculty network, each student has his/her own password and access rights. FHNS has 4 faculty computer rooms, one of which is used for free student access, and 6 departmental classrooms and laboratories equipped with computer technology.

The university-wide information systems include the Modular Academic Information System (MAIS), which is used for the administration of studies. In this system, students have access to all the relevant information for each subject, which is listed in the subject information sheets. All the necessary information is available to students on the faculty or departmental website. Teachers also provide students with teaching materials in digitised form, communicate and consult with students also via electronic communication (e-mail, MS Teams, Moodle) or via the department's website.

- c) Characteristics and extent of distance education applied in the study programme with the assignment to courses. Access, manuals of e-learning portals. Procedures for the transition from contact teaching to distance learning.

The University of Prešov in Prešov uses a content-active e-learning system of online education in the Moodle environment to support teaching. It is available at <https://elearning.unipo.sk/> and contains basic information, courses, and manuals. The e-learning system in the Moodle environment is available to all students, teachers, and staff of the University of Prešov to improve the quality of teaching.

University-wide e-learning provides courses for the UP Faculty of Sports, UP Faculty of Art. Other faculties, including FHNS, operate their own e-learning server. In case of exceptional conditions, a partial or complete transition to distance learning can be made. An effective method in this case is the use of interactive lectures via MS Teams and feedback via didactic tests via MS Forms. In case of exceptional epidemiological conditions, courses with practical content can be implemented in compliance with the current measures.

- d) Partners of the university in the provision of educational activities of the study programme and characteristics of their participation.

In the framework of the improvement of the Biology study programme we cooperate with Slovak and Czech workplaces under the leadership of eminent professors and research experts:

- Masaryk University, Faculty of Science, Institute of Anthropology - prof. PhDr. Jaroslav Malina, DrSc.
- Charles University, Faculty of Science, Department of Anthropology and Human Genetics - prof. RNDr. Jaroslav Brůžek, CSc.
- University of Constantine the Philosopher in Nitra, Faculty of Natural Sciences, Department of Zoology and Anthropology - prof. RNDr. Mária Vondráková, CSc.
- Comenius University Bratislava, Faculty of Natural Sciences, Department of Molecular Biology- prof. RNDr. Ján Turňa, CSc.
- Institute of Archaeology of the Slovak Academy of Sciences, Nitra - PhDr. Ladislav Olexa
- Cardiocentre - J. A. Reiman Prešov - prof. MUDr. Ján Kmec, PhD., MPH, FESC
- Imuna Pharm s.r.o., Šarišské Michalany
- Biotika a.s., Slovenská Ľupča
- Institute of Criminalistics and Examination of the Police of the Slovak Republic, Košice
- National Institute of Childhood Tuberculosis and Respiratory Diseases, n.o. Dolný Smokovec
- Analytical-diagnostic laboratories: Schneider, AdLa s.r.o.
- State Veterinary and Food Institute, Košice
- Institute of Livestock Physiology, Slovak Academy of Sciences, Košice
- Institute of Parasitology, SAV, Košice
- Bohemia Pharmaceuticals s.r.o., Prague

The participation of the above-mentioned departments is based on mutual cooperation and on projects, cooperation on research activities, professional publications and scientific articles, elaboration of referee opinions. Invited lectures on specific topics and excursions of students to the premises of the institutes are organised. Selected departments provide seminars, training on laboratory diagnostic techniques, workshops. We plan to implement cooperation e.g. in the form of exchange of thesis supervisors, in the framework of joint and transnational student competitions (SVOUČ, Biological Olympiad, etc.).

Students have the opportunity to undergo exchange stays, monthly or semester internships within the Erasmus+ programme at foreign institutions with which the Faculty of Humanities and Natural Sciences has signed inter-institutional agreements:

Charles University in Prague Czech Republic,
University of South Bohemia in České Budějovice, Czech Republic
Università degli Studi di Messina Italy,
Adam Mickiewicz University in Poznań, Poland
University of Wrocław, Poland
Vytautas Magnus University, Lithuania

The possibilities and conditions for students of the study programme to participate in mobility and internships are described in point 8f.

- d) Characteristics of the possibilities for social, sports, cultural, spiritual, and social activities.
UP students are provided with accommodation in four different facilities (ŠD - Ul. 17. novembra č.11; ŠD - Ul. 17. novembra č.13; ŠD - Nám. Mládeže č. 2; ŠD - Exnárova č. 36) and 2 specialized units (Orthodox Priest Seminary; Greek-Catholic Priest Seminary). The student house creates conditions for independent study and rest of the students in residence, for the cultural, social and sports life and for the

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development of the students' interests. Accommodation of UP students is arranged in double - quadruple rooms with separate sanitary rooms in each accommodation unit. In 2018, the renovation of ŠD 17. novembra 11 and 13 began, which was completed at the end of 2019. In 2021, the reconstruction of ŠD Nám. Mládeže č. 2. was finished. All facilities have internet connection directly in the rooms. There is a TV room, laundry, and kitchens on each floor. The University Pastoral Centre is available to students on the 11th floor. A hairdressing salon, a beauty salon and a health center offer their services on campus. Coffee and candy vending machines are available.

University students have the opportunity for free-time sports activities in UP sports facilities such as a swimming pool, gym, multipurpose sports complex, or multifunctional playground. In both semesters of the calendar year 2019, the Faculty of Sports organised the UP University Mixed Volleyball League and UP Football Mini-League for the students at the university, which are of constant popularity. The University Sports Days organized by the Faculty of Sports also have a long tradition, with almost 600 students actively participating in 2019. University students can also develop their sporting interests in several sports clubs and sections of TJ Slávia UP Prešov. Its annual membership consists of around 300 athletes. Every year, the Faculty of Sports also organises several periodic and non-periodic sports and sport-educational activities not only for students, but also for the public of different ages (Spring Run; Children's Sports Olympics of kindergartens; Olympic Pentathlon for Seniors; Run of the Olympic Day; Športáčik; ProSenior movement programme and others). In the implementation of these activities, the Faculty of Sports collaborates organizationally with students, the Prešov Olympic Club, and the City of Prešov.

There are 11 artistic ensembles at UP, which are members of the University Council for Artistic Activities. They function at individual faculties of the university, whose professional guarantors are artistic directors. The members of the ensembles are mainly students at the University. The university's artistic ensembles are an example of the free time use of university students, they represent the university at domestic and international artistic events such as: academic competitions, shows, festivals, TV and radio performances, recordings, they significantly influence the cultural and social life of the university by individual performances and at all-university and faculty festive events, they represent and create the image of the university within the city of Prešov, the Prešov region, nationally and internationally.

The University Pastoral Centre of Dr. Štefan Hesek in Prešov (hereinafter UPC) <http://upc.unipo.sk/> is part of the nationwide network of university pastoral centers. Its main task is to care for the spiritual needs of university students and teachers. For its activities at UP, UPC uses the chapel in the ŠD on ul. 17. novembra, the TV room in ŠD Exnárová 36 and the aula no.100 at FHNS.

GREEK CATHOLIC YOUTH PASTORAL CENTRE. The Greek Catholic Youth Pastoral Centre (GMPC) www.gmpc.grkatpo.sk, founded by the Archbishop's Office in Prešov, is also active in the spiritual sphere at UP. GMPC cooperates very closely with GTF UP and offers various free-time activities. The role of this center is to offer a space for mostly young people working and studying in the city of Prešov to meet, to engage in dialogue, to live their faith more fully as well as to live their mutuality with each other and with the world. This is done on the basis of friendship, conversations, talks, invited lectures, spiritual and free-time activities.

Students' halls of residence and the canteen: <https://www.unipo.sk/sdj>

UP Annual Report (2020):

<https://www.unipo.sk/public/media/9653/Vyrocnna%20sprava%20o%20cinnosti%20Presovskej%20univerzity%20v%20Presove%20za%20rok%202020.pdf>

- e) Possibilities and conditions for participation of the study programme students in mobilities and internships (indicating contact details), application instructions, rules for recognition of this education.

Participation of students of the study programme Biology in mobility and internships (with contacts), guidelines for application, rules for recognition of this education, etc. is organised and legally secured by the Department of International Relations at the University of Prešov (<https://www.unipo.sk/en/en/ir/>) and International Relations Office FHNS UP (<https://www.unipo.sk/en/faculty-of-humanities-and-natural-sciences/international-relations/>).

The study programme allows for adequate learning outside the university in domestic and foreign institutions, in particularly through the promotion of mobility. The results of this learning are recognised by the university. Mobility is regulated in the Study Rules in the section on the organisation of educational activities. Approval for mobility is granted by the Dean/Rector or, where appropriate, the Vice-Dean/Vice-Rector for International Relations. Part of the study is recognised in accordance with the Treaty, the European Standard and the European Credit Transfer System. The Rector's Directive "Procedure for the Implementation of Outgoing Student Mobility under the Erasmus+ Programme" is issued at the University of Prešov (UP) on the basis of the provisions of Section 15(1)(l) of Act No. 131/2002 Coll. on Higher Education and on Changes and Supplements to Some Acts, as amended. For exchange students, credits are evaluated based on their acquisition, i.e., the degree of compliance of the completed course with the given study programme is evaluated by the guarantor of the study. If the student is interested, he/she can also enroll in courses at his/her home institution and take the course by distance learning if the nature of the course allows it. Motivational videos, processes, procedures and guides for applying, selecting and completing mobilities are published on the websites: https://www.unipo.sk/public/media/15742/outgoing_student_mobilita_uvv.jpg, <https://www.youtube.com/watch?v=ZRmnQ08NMfg>, https://www.unipo.sk/public/media/15172/Var%C5%A1ava_E+.mp4, <https://www.facebook.com/Presovskauniverzita/videos/1143643639391766>. Study Rules UP: <https://www.unipo.sk/public/media/11422/Study%20Rules%20of%20the%20University%20of%20Presov.pdf> Rector's Directive: <https://www.unipo.sk/public/media/10602/Opatrenie-rektora-8-05-31.pdf>

Students of the study programme Biology (Bachelor) can take part in Erasmus+ mobility at the following foreign universities on the basis of inter-institutional agreements:

The outline description of the study programme is used to process Annex 2 of the application for granting the accreditation of the study programme.

Charles University in Prague Czech Republic,
University of South Bohemia in České Budějovice, Czech Republic
Università degli Studi di Messina Italy,
Adam Mickiewicz University in Poznań, Poland
University of Wrocław, Poland
Vytautas Magnus University, Lithuania
<https://www.unipo.sk/zahranicie/erasmus/dohody/zoznam/>

9. Required abilities and admission requirements for the study programme applicants

a) Required abilities and necessary admission requirements.

The long-term goal and strategic objective of the University is to prepare quality graduates in accredited study programmes. The precondition for achieving this goal is to admit students who meet demanding quality criteria. The University has developed a system of procedures for the admission of students elaborated in the Study Rules of The University of Presov in Articles 3 through 9 and in the Rector's Directive Admission Procedure.

The specific conditions of the admission procedure, corresponding to the specifics and peculiarities of study programmes, have been elaborated by each faculty. At FHNS UP, applicants are admitted to all bachelor study programmes without an entrance examination. Admission is based on the results obtained during high school studies (the academic average of the end-of-year school reports and the graduation certificate). If the number of applicants exceeds the faculty's capacity, priority will be given to applicants with a better academic average.

In determining the order of admission, the resulting academic average will be multiplied by the coefficient for the secondary school type: grammar school 0,6, secondary vocational school 0,8, secondary apprentice school 1,0).

Exceptional admission will be granted to applicants whose average (1st to 3rd year of secondary school) does not exceed 1.70 in grammar school, 1.40 in other secondary schools (without multiplication by the secondary school coefficient).

The admission procedure for a study programme applicant begins with the delivery of his/her written application for study to the faculty or university that implements the relevant study programme. In addition to the compulsory written application, the faculty also allows the delivery of the application in electronic form without a guaranteed digital signature, using an information system that enables the applicant to verify its registration in the information system from the date of its submission until the date of the end of the admission procedure. The dean may decide whether the admission procedure will include an entrance examination or whether applicants will be admitted without an entrance examination. In justified cases, the dean of the faculty may announce a second round of the admission procedure. In the case of a study programme conducted at a university, the rector decides on matters in which the dean has a decision-making power. The course and timetable of the entrance examination are determined by the dean of the faculty. The faculty determines the form and content of the entrance examination. The dean appoints the chairpersons of examination boards and admissions committees. The entrance examination takes place on the appointed date; however, the faculty may also appoint an alternative date. The dean may be asked for an alternative date for the admission examination by applicants who are attending secondary school abroad in the relevant year. The dean decides on admission to study. The dean's admissions committee, whose members are appointed by the dean, is an advisory body to the dean. The rector decides on admission to a study programme at the university. The rector's admissions committee, whose members are appointed by the rector, is an advisory body to the rector. The decision on the outcome of the admission procedure must be given in writing within 30 days of verification that the conditions for admission have been fulfilled. The decision must contain a statement, justification, and an instruction on the possibility of applying for a review of the decision. An applicant who does not prove that the basic conditions for admission have been met at the time of verification of admission conditions, may be admitted conditionally, provided that he or she is under an obligation to prove that the basic conditions for admission are met no later than on the date set for enrolment.

UP Rector's Directive No. 5/2021 Admission Procedure: https://www.unipo.sk/public/media/0190/OR_prijimacie_konanie-2.docx.pdf

b) Admission procedures.

Admission procedures to study at the University of Presov are organizationally and legally anchored in the Rector's Directive No.5/2021 and are available at: https://www.unipo.sk/public/media/0190/OR_prijimacie_konanie-2.docx.pdf (point 5.1 Information on the admission process). Specific and detailed information about the admission process for FHNS UP study programmes are available at: <https://www.unipo.sk/fakulta-humanitnych-prirodných-vied/informacie-pre-uchadzacov/pk/>.

c) Results of the admission process over the last period.

Academic year	Number of applications	Number of accepted students	Number of enrolled students
2016/2017	104	104	54
2017/2018	101	101	50
2018/2019	68	68	45
2019/2020	74	74	45
2020/2021	67	67	28
2021/2022	52	52	31
together	466	466	253

10. Feedback on the quality of provided education

a) Procedures for monitoring and evaluating students' opinions on the study programme quality.

The organizational and legal aspects of the processes for monitoring and evaluating students' opinions on the study programme quality are published at :

<https://www.unipo.sk/search/?q=sp%C3%A4tn%C3%A1+v%C3%A4zba>

<https://www.unipo.sk/rozvoj/MIKT/dotaznik/>

The outline description of the study programme is used to process Annex 2 of the application for granting the accreditation of the study programme.

Feedback on the quality of the provided education is carried out on a regular basis (every semester) through a questionnaire in the MAIS system.

b) Results of student feedback and related measures to improve the study programme quality.

The results of the survey focused on the evaluation of the quality of the study programme by students are published in MAIS in the SURVEY EVALUATION section. Measures for quality improvement are taken continuously in accordance with the Internal Quality System of UP in Prešov (<https://www.unipo.sk/vsk/>) and the Internal Quality System of FHNS UP in Prešov (<https://www.unipo.sk/fakulta-humanitnych-prirodných-vied/hlavne-sekcie/VSK/rada-pre-kvalitu/>).

The results of the student feedback are presented and consulted at the FHNS Dean's Collegium meeting.

Evidence: Minutes of the FHNS Dean's Collegium meeting.

Feedback from students is also monitored by each teacher as part of the educational process of the subjects they teach. The impact of the feedback on the respective subjects has been implemented in the preparation of course information sheets in order to improve the teaching process and to develop the knowledge, skills and competences of the students with regard to the requirements of practice. Student comments related to the curriculum were promptly addressed and evaluated during working sessions by members of the Department of Biology over the years.

The following students have provided us with their opinions in the preparation of the curriculum:

Bc. Gabriela Sabolová

Mgr. Andrea Buriková

The meetings were held via the MS Teams platform, e-mail and telephone communication. Minutes of the meetings were drawn up in the Administrative Records section (ADMIN_FACULTY). We did not note any major comments on the composition of the ESL and the quality of the curriculum. Substantiated comments were discussed at the working meetings of the study programme guarantors and incorporated into the description of the study programme. The alignment of the Biology programme of study and the incorporation of comments on the quality of the programme of study was carried out in accordance with the formalised processes of the internal system, which are embedded in the documents:

Basic Principles of Assurance and Evaluation of the Internal Quality System of the University of Prešov:

https://www.unipo.sk/public/media/37750/Opatrenie%20rektora%20C4%8D_1_2021_V%C3%BDchodiskov%C3%A9%20principy%20zabezpe%C4%8Dovania%20VSK%20PU.pdf

Directive for the creation, modification, approval, cancellation of study programmes and submission of applications for accreditation of study programmes and fields of study of habilitation and inauguration proceedings at the University of Prešov:

https://www.unipo.sk/public/media/38257/Smernica%20C5%A0P_%20HK_%20IK%20PU.docx.pdf.

The documents declare an independent, unbiased, objective, professionally informed, transparent and fair assessment of the proposal and approval of the study programme, involving students, employers and other stakeholders. It is also guaranteed that those assessing and approving the programme of study are different from those involved in the design of the programme of study.

The reports on the comments on the curriculum by the stakeholders can be found in the Administrative Records (ADMIN_FACULTY), as well as the Opinion of the person responsible for the curriculum on the incorporation of the stakeholders' comments on the curriculum.

c) Results of graduate feedback and related measures to improve the study programme quality.

The results of graduate feedback on the SP submitted for accreditation, implemented at the university level were presented and consulted at the FHNS Dean's Collegium meeting. The results of the feedback from graduates and employers' representatives on the Regional Geography and Regional Development study programme, the curriculum and the course information sheet provide written comments, critical observations, suggestions and recommendations on the curriculum, the content of individual courses and the course information sheets. The minutes, video, and photo documentation of the meeting with graduates and employers' representatives held online on 13.12.2021 are available.

These comments and observations were noted and discussed at the department's work meeting on 21.12.2021 and some of them were incorporated into the content of individual courses and infolists. Measures related to the improvement of the quality of the study programme are in accordance with the documents Basic Principles of Assurance and Evaluation of the Internal Quality System of the University of Prešov in Prešov:

https://www.unipo.sk/public/media/39741/Rector's%20Decision%20No.%201_2021%20Basic%20principles%20of%20the%20IQS.pdf

Directive on the creation, modification, approval, cancellation of study programmes and submission of applications for accreditation of study programmes and fields of habilitation proceedings and inauguration proceedings at the University of Prešov in Prešov:

https://www.unipo.sk/public/media/39741/Rector's%20Decision%20No.%202_2021%20Directive%20on%20the%20creation,%20modification,%20approval,%20cancellation%20of%20SP%20and%20submission%20of%20applications%20for%20accreditation.pdf

The following alumni have provided us with their opinions in the preparation of the curriculum:

Mgr. Ondrej Ragač

Mgr. Dominika Maďarová

Meetings with graduates of the biology study programme were held via the MS Teams platform, e-mail and telephone communication. Minutes of the meetings were prepared in the Administrative records section (ADMIN_FACULTY). We did not note any major comments on the composition of the ESL and the quality of the curriculum. Substantiated comments were discussed at the working meetings of the study programme guarantors and incorporated into the description of the study programme. The alignment of the Biology programme of study and the incorporation of comments on the quality of the programme of study was carried out in accordance with the formalised processes of the internal system, which are embedded in the documents:

Basic principles of internal quality assurance and evaluation of the internal quality system of the University of Prešov in Prešov:

https://www.unipo.sk/public/media/37750/Opatrenie%20rektora%20C4%8D_1_2021_V%C3%BDchodiskov%C3%A9%20principy%20zabezpe%C4%8Dovania%20VSK%20PU.pdf

The outline description of the study programme is used to process Annex 2 of the application for granting the accreditation of the study programme.

Guidelines for the creation, modification, approval, cancellation of study programmes and submission of applications for accreditation of study programmes and disciplines of habilitation and inauguration procedures at the University of Prešov in Prešov:
https://www.unipo.sk/public/media/38257/Smernica%20%C5%A0P_%20HK_%20IK%20PU.docx.pdf

The documents declare an independent, unbiased, objective, professionally informed, transparent and fair assessment of the proposal and approval of the study programme, involving students, employers and other stakeholders. It is also guaranteed that those assessing and approving the programme of study are different from those involved in the design of the programme of study.

The reports on the comments on the curriculum by the stakeholders can be found in the Administrative Records (ADMIN_FACULTY), as well as the Opinion of the person responsible for the curriculum on the incorporation of the stakeholders' comments on the curriculum.

11. References to other relevant internal regulations and information concerning the study or the study programme student (e.g study guide, accommodation regulations, fee directive, guidelines for student loans, etc.).

Relevant internal regulations and information regarding the study or the study programme student are available from:

<https://www.unipo.sk/en/>

<https://www.unipo.sk/en/en/study/>

<https://www.unipo.sk/en/faculty-of-humanities-and-natural-sciences>

<https://www.unipo.sk/fakulta-humanitnych-prirodnch-vied/hlavne-sekcie/vz/>

<https://www.unipo.sk/fakulta-humanitnych-prirodnch-vied/hlavne-sekcie/VSK/>

<https://www.unipo.sk/fakulta-humanitnych-prirodnch-vied/AS-FHPV/>

<https://www.unipo.sk/informacie-o-univerzite/ouniverzite/dokumenty/>

<https://www.unipo.sk/vsk/dvsk/>

<https://www.unipo.sk/fakulta-humanitnych-prirodnch-vied/katedry/biologia/>