| Description of the study programme | |
|---|---|
| | |
| **Name of the higher education institution** | *Matej Bel University in Banská Bystrica* |
| **Address of the higher education institution** | *Banská Bystrica* |
| **Identification number of the higher education institution** | *CRN 30232295 / School Identification Number 714 0000 00* |
| **Name of the faculty** | *Faculty of Natural Sciences Matej Bel University (MBU) in Banská Bystrica* |
| **Address of the faculty** | *Tajovského 40, Banská Bystrica* |
| | |
| **Institution body for approving the study programme:** | *a. Approval bodies until 31.3.2021: Rector of MBU following negotiations at the Rector's College (study programme proposal) and the Scientific Board of the Faculty of Arts of MBU (documented study programme information) in accordance with Methodical Instruction No. 1/2021 for determining the organization and procedures for submitting applications for accreditation of the study programme in line with § 30 of Act No. 269/2018 Coll. until 31. 3. 2021.*<br><br>*b. Approval bodies after 31.3.2021: Board for the Internal Quality System of MBU in accordance with the statute of the Board approved by the Scientific Council of MBU on 10.12.2020 and in accordance with Directive No. 1/2021 on the creation, modification and approval of study programmes and submission of applications of the Slovak Accreditation Agency for Higher Education, dated 26.1.2021, approved by the Rector of MBU.* |
| **Date of the study programme approval or the study programme modification:** | 11.3.2021 |
| **Date of the last change to the study programme description:** | - |
| **Link to the results of the periodical evaluation of the study programme performed by the higher education institution:** | - |
| **Link to the evaluation report pertaining to the request for accreditation of study programme pursuant to Sec. 30 of Act. no. 269/2018 Coll.:** | - |
| | |
| **1 Basic information about the study programme** | |
| *a) name of the study programme* | *Number according to the register of study programmes* |
| **Environmental Biology** | **-** |
| *b) Level of higher education* | *ISCED-F education level code* |
| **III** | **III (doctoral) – 864 – doctoral study programme** |
| *c) place(s) of delivery of the study programme:* | Faculty of Natural Sciences Matej Bel University (MBU) in Banská Bystrica, Tajovského 40, Banská Bystrica |
| *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/fields.* | |

| | | | |
|---|---|---|---|
| Number and name of the field of study | **7 Ecological and Environmental Sciences** | ISCED-F codes of the field of study | **0522 Natural environments and wildlife** |

e) type of study programme (SP): *academically oriented, professionally oriented; translation, translation combination study programme (listing the specializations); teaching, teaching combination study programme (listing the specializations); artistic, engineering, doctoral, preparation for regulated profession, joint study programme, interdisciplinary studies.*

| | | | |
|---|---|---|---|
| Type of SP: | **academically oriented** | Teaching qualifications: | **-** |
| f) awarded academic title: | **PhD** | | |
| g) form of study: | **internal** | | |

h) In the case of joint study programmes, cooperating institutions and the range of study obligations the student fulfils at each of the given institutions (§ 54a of the Act on Higher Education Institutions).

*Obligations of a MBU student*

| | |
|---|---|
| Cooperating higher education institution (HEU) | |

*Obligations of a MBU student in relation to the cooperating HEU*

| | |
|---|---|
| *i) language or languages in which the study programme is delivered:* | Slovak, English |
| *j) standard length of the study expressed in academic years:* | 4 |
| *k) capacity of the study programme (planned number of students), the actual number of applicants and students:* | 5 |

**2. Graduate profile and learning objectives**

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 outcomes.

***Knowledge***

*The graduate acquires complex theoretical knowledge in the interdisciplinary combination of biological-ecological, and environmental sciences. They are familiar with the key practical applications and trends in the field with the emphasis on reconstruction of the ecosystem history, nature conservation, integrated territorial management, communities and populations, ecosystem services, biotechnological use of micro- and macro-organisms, methods of biological remediation in degraded and contaminated territories, ecological remediation and expert assessment of anthropic pressure on the biota, environment and humans including implementation measure proposals to reduce or eliminate the negative influence. They navigate relevant specialised literature and efficiently applies the knowledge in research. They are able to achieve original scientific results and present them in a foreign language to the scientific community in the form of publications as well as at domestic and international scientific and specialised events. They are continuously enhancing their knowledge and follow the developments in the field, and based on this, formulate new hypotheses and strategies to contribute to the development of the scientific discipline. They are able to create research project proposals to apply for domestic and international grants and succeed.*

*They can work independently as well as in larger interdisciplinary teams, and even coordinate specialised domestic and international research teams. They can apply critical and analytical thinking and participate in*

*the management and decision-making processes.*

***Skills***

*The graduate is familiar with the methodology of data collection in the laboratory as well as in the field. They can process, evaluate, store, and sort the data using the state-of-art software applications, statistical methods and GIS instruments, and interpret them in the context of the current knowledge in the field. They can apply their theoretical knowledge in practice to evaluate natural as well as human-influenced ecosystems, and predict their further development. They are qualified to propose and assess the suitability of basic conservation-based interventions, decide about the approach to the basic problems of species, community, and environment conservation, define the key issues and shortcomings in practical nature conservation and environmental maintenance. They can creatively present the results of their work, discuss it with experts, and communicate it to the lay public, use correct argumentation and defend their opinion on the issues related to natural processes, conservation, and environment. They are qualified to educate new experts.*

***Competences***

*The graduates can perform basic as well as applied research, and work in the area of nature and environment conservation, agriculture, forestry, and water management. They are qualified to work in the research institutes operated by the Slovak Academy of Sciences (SAS), universities, specialised laboratories, institutes operated by the respective ministries, state and public administration, all levels of local and regional government, museums, consulting, and business.*

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.

- *expert in nature and land conservation in specialised organisations operated by the ministry of environment;*
- *expert qualified to evaluate the environmental impacts for private companies or as a self-employed person;*
- *researcher in specialised biological and ecological sciences at SAS institutes, universities, and research institutes operated by the respective ministries*

c) relevant external stakeholders who have provided the statement or a favourable opinion on the compliance of the acquired qualification with the sector-specific requirements for the profession

**1 State Nature Conservancy of Slovak Republic, Banská Bystrica**

**2 HBH projekt spol. s.r.o. – organisational branch Slovakia, Banská Bystrica**

**3 Employability**

a) Evaluation of the study programme graduates employability.

*new SP*

b) If applicable, indicate the successful graduates of the study programme.

*new SP*

c) Evaluation of the study programme quality by employers (feedback)

*Quality assessment of the study programme has been performed by employers who created evaluation reports attached to the accreditation file.*

**4 Structure and content of the study programme**

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

*The rules for the design of study plans within the field of study are specified Directive No. 1/2021 Creation, modification and approval study programs and submission of applications to Slovakia Accreditation Agency for Higher Education and the MBU Study Regulations.*

| | |
|---|---|
| **b) recommended study plans for individual study paths** | *Environmentalna_biologia_PhD(D)_Studijny plan.docx* |
| **c) Credit distribution** | |
| *The total number of credits required for the successful completion of the study within this study programme:* | **240** |

*Non-teaching study programmes (specify the credit allocation to the individual components)*

| | |
|---|---|
| *Number of credits for compulsory courses* | **48** |
| *number of credits for professional practice* | **-** |
| *Number of credits for compulsory optional courses* | **20** |
| *Number of credits for optional courses* | **12** |
| *Number of credits for the state examination* | **dissertation examination 20 / defence of the dissertation thesis: 40** |
| *Teaching/translation SP (specify the credit allocation to the individual components)* | |
| **Common basis (teaching/translation studies)** | |
| *Number of credits for compulsory courses* | |
| *number of credits for teaching practice* | |
| *Number of credits for compulsory optional courses* | |
| *Number of credits for optional courses* | |
| **Teaching qualification** | |
| *Number of credits for compulsory courses* | |
| *Number of credits for compulsory optional courses* | |
| *Number of credits for optional courses* | |

**d) 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.**

**e) rules for verification of learning outcomes, students assessment and the possibilities of appealing against the assessment.**

**f) conditions for recognition of studies or a part of studies.**

*The requirements and rules for successful completion of the study and state examinations as well as other study-related rules are defined in the Study Regulations of the Faculty of Natural Sciences (FNS MBU). Link: https://www.fpv.umb.sk/studium/pre-studenta/studijny-poriadok-a-ine-dokumenty/studijny-poriadok.html*

**g) topics of final theses of the study programme**

*1. The history and conservation of the grass and herb vegetation in the Carpathians (**M. Janišová – external supervisor)***
*2. Diachronous evaluation of the changes in the grass and herb biotopes (**M. Janišová – external supervisor)***
*3. Ecology and protection of large predators in Slovakia (**P. Urban**)*
*4. Comparison of populations of selected amphibian taxa and the level of their endangerment in the Slovak and Ukrainian Carpathians (**P. Urban**)*
*5. Genetic diversity and differentiation of small rodent populations in the subalpine and alpine ecosystems in the Western Carpathians **(R. Alberty)***
*6. Euglenoids (Euglenophyceae) as model organisms for investigating the harmful effect of aromatic hydrocarbons, and the identification of their presence in the environment (**M. Vesteg**)*
*7. Symbiotic interactions between euglenoid flagellates and other microorganisms (**M. Vesteg**)*
*8. Spontaneous and controlled succession vs. artificial remediation of degraded ecosystems (**M. Turisová**)*
*9. Spontaneous and controlled succession of the vegetation covering mining slag heaps contaminated by heavy metals (**M. Turisová, R. Kanianska, P. Andráš**)*
*10. Biological indicators in lake sediments as a tool for reconstructing past environmental changes (**L. Hamerlík, P. Bitušík**)*
*11. Host specialisation and species diversity of the fungi order Polyporales sensu lato*
*12. Ecosystem services in non-forest biotopes – identification, evaluation, conservation, and long-term sustainable use (**R. Kanianska, J. Švajda**)*

**h) other study-related rules and procedures**

*Rules for the assignment, processing, opposition, defence and evaluation of final theses in the study programme,*

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| *Formal requirements related to application for theses, their submission, and assessment are defined in the FNS MBU Study Regulations.*<br>*link: https://www.fpv.umb.sk/studium/pre-studenta/studijny-poriadok-a-ine-dokumenty/studijny-poriadok.html*<br>*Detailed rules for the creation of final theses are specified in Directive No. 12/2011 on final, rigorous, and habilitation theses at MBU in Banská Bystrica*<br>*link: https://www.fpv.umb.sk/studium/pre-studenta/zaverecne-prace-a-statne-skusky.html* |
| *Opportunities and procedures for participation in student mobility* |
| *The opportunities and conditions for participation in mobility are defined in Directive No. 2/2017 on international mobility at the Faculty of Natural Sciences MBU in Banská Bystrica More relevant information on mobility can be found on the faculty website.*<br>*link: https://www.fpv.umb.sk/medzinarodne-vztahy/mobility-erasmus/* |
| *Rules for adherence to academic ethics and rules for drawing consequences* |
| *At MBU, there is an Ethical Committee, which addresses the questions and issues related to adherence to academic ethics (employees and students). Relevant information about the Ethical Committee and its tasks can be found at the university website.*<br>*link: https://www.umb.sk/univerzita/univerzita/o-univerzite/akademicka-etika-umb/eticka-komisia/* |
| *Procedures applicable to students with special needs* |
| *Students with special needs follow the Study Guide for Students with Special Needs (SSN) published on the university website.*<br>*link: https://www.umb.sk/studium/student/student-so-specifickymi-potrebami/informacie-pre-studentov-so-specifickymi-potrebami.html*<br>*FNS MBU has a SSN coordinator who supports the students with special needs and helps them adapt to the university environment, and resolve any study-related issues.*<br>*link: https://www.fpv.umb.sk/studium/pre-studenta/studijny-poriadok-a-ine-dokumenty/sprievodca-studiom-pre-studentov-so-specifickymi-potrebami.html* |
| *Procedures for filing complaints and appeals by students* |
| *If the student wishes to file a complaint related to their study or assessment, they can do so in writing or submit a request to the Vice-Dean for Pedagogical Activities. If they wish to request commission examinations, the procedure follows the rules defined in the FNS MBU Study Regulations.*<br>*link: https://www.fpv.umb.sk/studium/pre-studenta/studijny-poriadok-a-ine-dokumenty/studijny-poriadok.html*<br>*Complaints related to violation of the Code of Ethics can be submitted directly to the Ethical Committee in writing.*<br>*link: https://www.umb.sk/univerzita/univerzita/o-univerzite/akademicka-etika-umb/eticka-komisia/* |

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| **5 Course information sheets of the study programme** | |
| *Link:* | *Environmentalna_biologia_PhD(D)_Informacne_listy.docx* |
| **6. Current academic year plan and current schedule** | |
| Year plan: | *https://www.fpv.umb.sk/studium/pre-studenta/harmonogram-studia.html* |
| *Schedule* | - |
| **7 Persons responsible for the study programme** | |
| **a) the person responsible for the delivery, development, and quality of the study programme** | |
| *Name and surname (with titles)* | prof. RNDr. Peter Bitušík, CSc. |
| *Position:* | head of the department |

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|---|---|
| *Telephone* | 048 / 446 7,110 |
| *E-mail:* | peter.bitusik@umb.sk |

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

| *Name and surname (with titles)* | *List of profile courses* | *Contact (telephone/e-mail)* |
|---|---|---|
| prof. RNDr. Peter Bitušík, CSc. | *Paleoecology: Field Methods, Data Processing and Interpretation* | 048 446 7110/ peter.bitusik@umb.sk |
| doc. Ing. Ladislav Hamerlík, PhD. | *Paleoecology: Field Methods, Data Processing and Interpretation* | 048 446 7105/ ladislav.hamerlik@umb.sk |
| doc. Ing. Radoslava Kanianska, CSc. | *Ecological Remediation of Degraded and Contaminated Environments* | 048 446 5810/ radoslava.kanianska@umb.sk |
| doc. RNDr. Ingrid Turisová, PhD. | *Ecological Remediation of Degraded and Contaminated Environments* | 048 446 7106/ ingrid.turisova@umb.sk |
| doc. Ing. Peter Urban, PhD. | *Conservation Biology* | 048 446 7101/ peter.urban@umb.sk |
| *Mgr. Matej Vesteg, PhD.* | *Environmental Microbiology and Microbial Community Ecology* | 048 4467109/ matej.vesteg@umb.sk |
| *prof. RNDr. Peter Andráš, CSc.* | *Ecological Remediation of Degraded and Contaminated Environments* | 048 446 5808/ peter.andras@umb.sk |

**c) List of teachers in the study programme**

| *Name and surname (with titles)* | *List of courses* | *Contact (telephone/e-mail)* |
|---|---|---|
| *doc. RNDr. Roman Alberty, CSc.* | *Conservation Genetics* | 048 446 7108/ roman.alberty@umb.sk |
| *prof. RNDr. Peter Andráš, CSc.* | *Ecological Remediation of Degraded and Contaminated Environments*<br><br>*Global Environmental Changes in the History of Earth* | 048 446 5808/ peter.andras@umb.sk |
| *prof. RNDr. Peter Bitušík, CSc.* | *Paleoecology: Field Methods, Data Processing and Interpretation* | 048 446 7110/ peter.bitusik@umb.sk |
| *doc. Ing. Ladislav Hamerlík, PhD.* | *Statistical Methods and Research Design in Biology and Ecology*<br><br>*English Communication for Scientists*<br><br>*Paleoecology: Field Methods, Data Processing and Interpretation* | 048 446 7105/ ladislav.hamerlik@umb.sk |

| | | |
|---|---|---|
| *doc. Ing. Radoslava Kanianska, CSc.* | *Ecological Remediation of Degraded and Contaminated Environments* | 048 446 5810/ radoslava.kanianska@umb.sk |
| *Mgr. Radovan Kyška-Pipík, PhD* | *Geochronology and Geoanalytical Methods in Paleoecology* | pipik@savbb.sk |
| *Mgr. Rastislav Milovský, PhD.* | *Geochronology and Geoanalytical Methods in Paleoecology* | milovsky@savbb.sk |
| *Ing. Marek Svitok, PhD.* | *Statistical Methods and Research Design in Biology and Ecology* | 045 5206 319/ svitok@tuzvo.sk |
| *Ing. Juraj Švajda, PhD., MSc.* | *Adaptive Management in Area and Species Based Conservation* | 048 446 7106/ juraj.svajda@umb.sk |
| *doc. RNDr. Ingrid Turisová, PhD.* | *Ecological Remediation of Degraded and Contaminated Environments*<br><br>*Biosystematics, Phylogeny, and Plant Ecology* | 048 446 7106/ ingrid.turisova@umb.sk |
| *doc. Ing. Peter Urban, PhD.* | *Methodology and Ethics of Scientific Work*<br><br>*Conservation Biology*<br><br>*Adaptive Management in Area and Species Based Conservation* | 048 446 7101/ peter.urban@umb.sk |
| *Mgr. Matej Vesteg, PhD.* | *Environmental Microbiology and Microbial Community Ecology* | 048 4467109/ matej.vesteg@umb.sk |

**d) List of topics of final theses in the study programme**

| *Name and surname (with titles)* | *The list of current dissertation thesis topics* | *Contact (telephone/e-mail)* |
|---|---|---|
| *doc. RNDr. Roman Alberty, CSc.* | | 048 446 7108/ roman.alberty@umb.sk |
| *prof. RNDr. Peter András, CSc.* | | 048 446 5808/ peter.andras@umb.sk |
| *prof. RNDr. Peter Bitušík, CSc.* | | 048 446 7110/ peter.bitusik@umb.sk |
| *doc. RNDr. Svetlana Gáperová, PhD.* | | 048 446 7107/ svetlana.gaperova@umb.sk |

| | | |
|---|---|---|
| *doc. Ing. Ladislav Hamerlík, PhD.* | | 048 446 7105/ ladislav.hamerlik@umb.sk |
| *Mgr. Monika Janišová, PhD.* | *Ecosystem services in non-forest biotopes – identification, evaluation, conservation, and long-term sustainable use* | 02 5942 6174/ monika.janisova@savba.sk |
| *doc. Ing. Radoslava Kaniansk a, CSc.* | | 048 446 5810/ radoslava.kanianska@umb.sk |
| *Mgr. Radovan Kyška-Pipík, PhD* | | pipik@savbb.sk |
| *Ing. Juraj Švajda, PhD., MSc.* | | 048 446 7106/ juraj.svajda@umb.sk |
| *doc. RNDr. Ingrid Turisová, PhD.* | *Immobilisation of the potentially toxic elements in the contaminated soils* | 048 446 7106/ ingrid.turisova@umb.sk |
| *doc. Ing. Peter Urban, PhD.* | | 048 446 7101/ peter.urban@umb.sk |
| *Mgr. Matej Vesteg, PhD.* | *Symbiotic interactions between euglenoid flagellates and other microorganisms*<br>*Euglenoids (Euglenophyceae) as model organisms for investigating the harmful effect of aromatic hydrocarbons, and the identification of their presence in the environment* | 048 446 7109/ matej.vesteg@.umb.sk |
| *Link to the staff register:* | https://www.portalvs.sk/regzam/?do=filterForm-submit&university=714000000&faculty=714070000&sort=surname&employment_state=yes&filter=Vyh%C4%BEada%C5%A5 | |
| *Link to the staff RATPs:* | https://umbsk.sharepoint.com/sites/AkreditaciaFPV | |

**e) student representatives representing the interests of students of the study programme (name and contact details)**

| *Name and surname (with titles)* | *Contact (telephone/e-mail)* |
|---|---|
| Mgr. Nikola Benková | 048 446 4156/ nikola.benkova@umb.sk |
| Mgr. Miriam Trniková | 048 446 7147/ miriam.trnikova@umb.sk |

**f) study advisor of the study programme**

| *Name and surname (with titles)* | *Contact (telephone/e-mail)* | *Link to the consulting website* |
|---|---|---|

| | | |
|---|---|---|
| Ing. Juraj Švajda, PhD. MSc. | 048 446 7106/ juraj.svajda@umb.sk | https://www.fpv.umb.sk/jsvajda/ |

**g) other supporting staff of the study programme**

***Study officer***

| *Name and surname (with titles)* | *Contact (telephone/e-mail)* |
|---|---|
| Mgr. Jana Smolecová | 048/4467407<br>jana.smolecova@umb.sk |

***International relations and mobility officer***

| *Name and surname (with titles)* | *Contact (telephone/e-mail)* |
|---|---|
| Mgr. Viera Pavlovičová | 048/4467439<br>viera.pavlovicova@umb.sk |

**8. Spatial, material, and technical provision 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).**

*For the purpose of teaching the Environmental Biology study programme, there are 7 laboratories at the Department of Biology and Ecology equipped with state-of-art technology, and 4 classrooms at the Department of Environmental Management.*

*The laboratory for the research of genetic and species diversity as well as the instrumental laboratory are available for teaching practical microbiology, molecular biology and genetics as well as for research work performed by the department teachers and doctoral students. The equipment includes a tool for quick identification and typisation of microorganisms (Maldi-TOF) real-time PCR cycler, PCR thermocycler, gel documentation system, UV-VIS spectrophotometer, fluorescence microscope, 2 laboratory microscopes, aseptic box, hot air shaker, cooled centrifuge, cell disintegrator and homogeniser, 2 biological thermostats cooled thermoblock, hot air steriliser, deep-freezer box, ultra-pure water system and ice maker.*

*The laboratory of structural botany and zoology is used for teaching botany, mycology, and physiology. There is also a laboratory of experimental mycology with vaccination, cultivation, and the preparation rooms. Besides teaching, they are all used for research purposes as well. The equipment includes 12 microscopes and 12 stereo microscopes, a professional microscope with imaging and notebook, 2 sterilisers, microtome, vaccination box, 2 thermostats, laboratory autoclave, cooler and freezer.*

*The laboratory of paleoecology for doctoral and Master students provides 7 stereo microscopes, 2 laboratory microscopes (1 with imaging), multi-view microscopes and large capacity refrigerators for storing samples.*

*The laboratory of systematic zoology and ecology provides 12 biological microscopes and 12 stereomicroscopes; it is used for teaching zoology and ecology. The laboratory of human biology is used for teaching courses covering human biology and serves as a seminar room as well.*

*All laboratories used for teaching include PC and projection technology. The biological-ecological disciplines are also taught in the faculty laboratory equipped with digital technology (each desk provides a computer, which can be connected to digital microscopes). The laboratory also includes portable measuring systems with probes for measuring abio- and biological parameters (atmospheric oxygen and carbon dioxide, spirometer, EKG probe), which can be connected to the computers via Bluetooth units.*

*Further equipment is available for field teaching: telescopes, GPS, field analysers for evaluating the water and soil parameters, and instruments for evaluating the working environment parameters. The faculty provides a botanical herbarium with domestic flora, herbarium of plant organ morphology, mycology herbarium, and a greenhouse with a small lake biotope. There is also a facility for handicapped birds at the university premises.*

*The glass cabinets in the department corridors contain more than 200 dermoplastic specimens of birds and mammals used for teaching zoological disciplines.*

**b) characteristics of the study programme information management (access to study literature according to Course information sheets, access to information databases and other information sources, information technologies, etc.).**

*Library and information services are provided by the MBU University library with centres at Tajovského 40 and 51, and branches at individual faculties. Individual departments also provide their own smaller libraries. The university library provides document loans and in-person study, consulting, research, reference service, copying, and Internet access 54 hours/week plus online services and access to electronic information sources 24/7.*

*The libraries comprise more than 277,000 scientific and scholarly monographs, textbooks, proceedings, encyclopaedias, dictionaries, etc. New items are acquired based on the current study and research needs. The fund includes 251 periodicals (120 from abroad). Final and qualification theses defended at the university have been available online since 2009. More than 700 textbooks and other teaching materials published by the university are available in the MBU Virtual Study Room.*

*The university library provides access to national project databases, scientometric databases Web of Science, Scopus and the following full text research databases: ACM, ProQuest Central, ProQuest Ebook Central, ScienceDirect, SpringerLink, Springer Nature, Wiley Online Library. It also provides access to the Cambridge Journals, Emerald full text databases as well as educational videos on the HSTalks platform.*

*The Universal Study Room at Tajovského 51 offers more than 16,500 books and 134 periodicals available for in person study. All fields of study are covered. Office hours: Monday – Wednesday (8.30 am – 9.00 pm), Thursday – Friday (8.30 am – 4.00 pm). The European Documentation Centre is a part of the study room. The study room also manages the deposit of printed final and qualification theses.*

*The Office of Borrowing at Tajovského 40 is the central office. 87,000 documents can be loaned and taken outside the library. Office hours: Monday – Friday 9.00 am – 4.00 pm. An interlibrary loan service is also offered. Specifically for the Environmental Biology SP, the department libraries (Biology and Ecology, Environmental Biology) are available. The libraries provide in-person and off-site document loans; they contain more than 4,000 books, textbooks, monographs, domestic and international scientific journals, proceedings, methodological materials, videos, and CD materials. Every year, new non-periodical scientific and specialised publications are added as well as new issues of the research journals. Students can also use the literature offered by the Earth Science Institute and Plant Science and Biodiversity Center of the Slovak Academy of Sciences, which provide online access to Web of Science and Scopus as well as selected journals published by Elsevier, Springer, and Blackwell.*

**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 development of distance education follows the successful Project no. ITMS 26110230077 entitled "Development of Innovative Forms of Education at Matej Bel University in Banská Bystrica, Activity 2.1: Virtual university MBU – creation of the teaching contents and system implementation. In terms of this projects, a number of e-learning courses were created in the Moodle environment within the presented study programme. Every teacher responsible for the course contents can create e-courses (i.e. upload a variety of materials), manage the number of students in the course, manage and delivers the activities in the course (check questions, tests, seminar works, etc.). In this environment, students take their written examinations. They are continuously prepared for them using test questions and tasks at the end of learning blocks in order to become adept with the environment and question types. Online video lectures take place mostly in MS Teams, a platform which provides audio/video, document sharing, chat, and creation of separate study groups. The Forms (Office 365) application also provides a way to test students, since it is interconnected with MS Teams, it allows simple publishing of their results. Based on the course specifics or teachers' personal preference, Zoom and Google Meet platforms (for as many as 100 participants) are also used for lectures.*

**d) Institution partners in providing educational activities for the study programme and the characteristics of their participation.**

*State Nature Conservancy of Slovak Republic, Banská Bystrica;*
*Slovak Environment Agency*
*Plant Science and Biodiversity Center at SAS (participation in the SP preparation and teaching);*
*Earth Science Institute at SAS (participation in the SP preparation and teaching);*
*HBH projekt spol. s.r.o. – organisational branch Slovakia, Banská Bystrica*
*Slovak Museum of Nature Protection and Speleology, Liptovský Mikuláš;*
*Slovak Water Management Enterprise; Slovak hydrometeorological institute*

**e) characteristics of the possibilities for social, sports, cultural, spiritual and social activities.**

*Besides education in a variety of study programmes, the university also offers a wide scope of cultural, sports, and spiritual activities. The university operates several sports clubs and artistic ensembles, and students can use the university sports facilities. There is also the University Pastoral Centre. All relevant information can be found on the faculty website.*
*link: https://www.umb.sk/studium/student/volny-cas/*
*link: http://upcbb.sk/o-upc/kto-sme/*

**f) 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.**

*All relevant information on mobility can be found on the faculty website.*
*link: https://www.fpv.umb.sk/medzinarodne-vztahy/mobility-erasmus/*
*Each faculty has a student mobility coordinator who provides students with the initial information about mobility opportunities and guides them through the formal procedures.*
*link: https://www.fpv.umb.sk/medzinarodne-vztahy/mobility-erasmus/koordinatori-programu-erasmus.html*

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

**a) required abilities and necessary admission requirements**

*All information on the study offer and admission procedure including the examination syllabi for the individual study programmes in the upcoming academic year can be found in the document entitled Study Opportunities and the Admission Procedure in Academic Year xx/xx.*
*Current version: https://www.fpv.umb.sk/studium/pre-uchadzaca/podmienky-prijatia-na-studia-v-roku-2021-2022/*
*More information about the admission procedure to the doctoral study at FNS MBU are published on the faculty website in accordance with the currently valid Directive on Doctoral Study at FNS MBU.*
*link: https://www.fpv.umb.sk/studium/pre-studenta/doktorandske-studium/smernica-doktorandskeho-studia.html*

**b) admission procedures**

*The admission procedures and conditions are defined in the FNS MBU Study Regulations.*
*link: https://www.fpv.umb.sk/studium/pre-studenta/studijny-poriadok-a-ine-dokumenty/studijny-poriadok.html*

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

*If the written entrance examination takes place, the results are published on the faculty website on the day of this examination.*
*The applicants who meet the admission conditions receive a decision on their admission including other relevant documents by post. The results of the admission procedure can also be found in the academic information system.*

**10. Feedback on the quality of education**

**a) procedures for monitoring and evaluating students' opinions of the study programme's quality**

*1. Every year after the state examinations have been finished, a sociological survey is performed at the faculties to collect information from the fresh Bachelor and Master graduates in order to evaluate the study programmes. Then overview of the course of the study, contents of the study programme, and suitability of the conditions are monitored. The survey is anonymous; students fill in the forms after they successfully complete their state examination. Subsequently, the forms are processed using TAP software.*
*The poll is evaluated on the university level and the results are included in the MBU Report on Pedagogical Activity. On the faculty level, the poll results are analysed in detail to observe the trends across several years for all study programmes. Subsequently, the faculty and departments adopt measures to improve the respective indicators. The poll results are presented at the Dean's Board and College and are a part of the FNS MBU Report on Pedagogical Activity.*

*2. Another poll focuses on the evaluation of teachers. The goal is to receive feedback from students regarding the specific teachers (approach to teaching and student assessment). This poll allows students to formulate their opinions on a specific teacher and their work and complain if they wish. The poll is anonymous and takes place in AIS. Each teacher has access to their own results; heads of departments have all results pertaining to the department staff. Any shortcomings are resolved at the department in cooperation with the Vice-Dean for Pedagogical Activities.*

**b) results of student feedback and related measures to improve the study programme quality**

*The results of the poll focused on the students' opinions on their teachers' performance are stored in the academic information system.*

**c) results of graduate feedback and related measures to improve the study programme quality**

*The results of the poll focused on the graduates' evaluation of their study programmes upon their completion are a part of the Yearly Report of MBU Activity on the university level and Reports on Pedagogical Activity on the faculty level.*

**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.).

| *Document type* | *Link* |
|---|---|
| Faculty of Natural Sciences (FNS MBU) Study Regulations | https://www.fpv.umb.sk/studium/pre-studenta/studijny-poriadok-a-ine-dokumenty/studijny-poriadok.html |
| Study Guide | https://www.fpv.umb.sk/studium/pre-studenta/studijny-poriadok-a-ine-dokumenty/sprievodca-studiom.html |
| Study Guide for Students with Special Needs | https://www.fpv.umb.sk/studium/pre-studenta/studijny-poriadok-a-ine-dokumenty/sprievodca-studiom-pre-studentov-so-specifickymi-potrebami.html |
| Directive No. 12/2011 on final, rigorous, and habilitation theses at MBU in Banská Bystrica | https://www.fpv.umb.sk/studium/pre-studenta/zaverecne-prace-a-statne-skusky.html |
| Student Disciplinary Code at Matej Bel University in Banská Bystrica | https://www.fpv.umb.sk/studium/pre-studenta/studijny-poriadok-a-ine-dokumenty/disciplinarny-poriadok.html |

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| Directive No. 5/2020 on tuition and fees at MBU and awarding of scientific and pedagogical titles for the 2021/2022 academic year. | https://www.fpv.umb.sk/studium/skolne-a-poplatky-spojene-so-studiom/skolne-a-poplatky-v-ar-2021-2022.html |
| FNS MBU Scholarship Regulations | https://www.fpv.umb.sk/studium/stipendia/stipendijny-poriadok.html |
| Directive No. 7/2016 on doctoral study at Matej Bel University in Banská Bystrica | https://www.fpv.umb.sk/studium/pre-studenta/doktorandske-studium/smernica-doktorandskeho-studia.html |