

The University of Nova Gorica

Graduate School

Monitoring, identification and quality assurance

Report for the academic year 2020/2021

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1. PRESENTATION OF THE GRADUATE SCHOOL

All postgraduate study programs and third-level programs (doctoral programs) at the University of Nova Gorica are combined and implemented by the Graduate School (GS). Individual study programs are closely linked with UNG research units (laboratories and centres) and other research institutions in the United States and around the world, where postgraduate students can conduct research as part of their studies and participate in international research processes and projects. GS provides a creative environment in which students, researchers, and experts from various departments and external institutions collaborate to create new knowledge and transfer it to the business environment. The connected and unified postgraduate faculty enables great selectivity and interdisciplinarity in the design of individual doctoral study programs, as each student can select the most appropriate courses from the wide range of complementary study programs offered by the ECTS credit system. Interchangeability with related study programs at other universities in Slovenia and abroad is also possible, providing students with a high level of mobility.

Environmental Sciences, Karstology, Physics, Humanities, Cultural Heritage Studies, Molecular Genetics and Biotechnology, Cognitive Language Sciences, and Materials were among the eight doctoral study programs introduced in 2020/2021. From the 2017/2018 academic year onwards, all GS doctoral study programs are four-year programs (240 ECTS). A summary of the programs is provided below, and the contents of the study programs and curricula are detailed on the GS and UNG websites:

<http://www.ung.si/sl/studij/fakulteta-za-podiplomski-studij/>

➤ **Environmental Sciences (third level):**

The doctoral program in Environmental Sciences continues the tradition of our oldest postgraduate program in Environmental Sciences, which we implemented in 1995. The program is highly interdisciplinary and research oriented. It offers students the opportunity to focus on three key segments of the environment: water, soil and air. Within individual fields, students can focus on topics such as the study of phenomena in specific segments of the environment, measurement techniques for pollution detection and control, waste management and its consequences, advanced procedures and materials for wastewater and air treatment, chemical, physical, and biological effects and health consequences of pollution, toxicology, biodiversity conservation, and environmental management. Due to the specifics of individual contents, a strong emphasis is placed on individual research work between the mentor and the student, allowing for a good flow of experience and knowledge to solve the most difficult tasks in the student's future career. Students work with mentors and top researchers in the Laboratory for Environmental and Life Sciences at UNG, as well as partner research institutions at home and abroad, on their research projects.

➤ **Physics (third level):**

The doctoral program in Physics is designed for students who want to develop advanced research skills and knowledge in experimental and theoretical physics in the following areas:

High-energy astrophysics and experimental astrophysics, which are related to modern cosmology and elementary particle astrophysics. Students collaborate with top researchers

from UNG's *Centre for Astrophysics and Cosmology* on their research. All research is intertwined with the work of various international collaborations (Pierre Auger Observatory, Cherenkov Telescope Array, Fermi LAT, Swift, Gaia, Large Synoptic Survey Telescope, Liverpool Telescope), where students can contribute to the development of large detection systems as well as the capture, analysis, and interpretation of physical data.

Atmospheric physics, in which students can conduct research at UNG's *Centre for Atmospheric Research* or participate in their international research projects.

Condensed matter and soft matter physics, where students can conduct research into the electronic and magnetic properties of materials like thin films of organic semiconductors, two-dimensional and other functional materials like graphene, in the *Laboratory of Organic Physics substances* and the *Materials Research Laboratory*, or use cutting-edge photonic and electron spectroscopic techniques to characterize the quantum properties of matter at the UNG *Quantum Optics Laboratory* or at partner international synchrotron light and free-electron laser laboratories (Elettra and FERMI in Trieste, ESRF in Grenoble, Alba in Barcelona, etc.).

➤ **Karstology (third level):**

The doctoral program Karstology is a unique doctoral program in the field of karstology in the world. It is the world's only comprehensive multidisciplinary karstology study, and the only one where a student can obtain the title of Doctor of Science in the field of karstology. Slovenia was the first country in the world to introduce or enable independent study of karstology as a whole (karst surface, karst underground, and karst hydrogeology), and it remains the only example of independent and comprehensive karstology research in the world.

In the field of karst science, the program combines research and administrative aspects. It is primarily aimed at students of natural sciences and other related fields (for example, geography, geology, hydrogeology, physics, biology, microbiology, ecology) as well as anyone interested in learning more about karst, its research, protection, and guidelines for intervention. The program is built around an in-depth presentation of Slovenian and international karstology. It focuses on three-dimensional landscape and karst heritage knowledge. Students learn about the laws of karstification, speleological, geological, geographical, hydrological, physical, biological, microbiological, and ecological characteristics of the karst surface and underground, karst around the world, and research methodology, karst measurements, and the history of karst research. The program trains students to conduct independent research and applied work (karst interventions) in the field of karstology. The study is mostly conducted as an individual study. The program is supplemented by a large number (42) of elective courses.

The doctoral program Karstology is carried out in close collaboration with the ZRC SAZU Institute for Karst Research in Postojna, with whom UNG has signed a contract on long-term cooperation in the implementation of this doctoral program and in providing both course holders and mentors to doctoral students, as well as the possibility of conducting research work of students within the framework of their research projects taking place at

the Institute for Karst Research. Students at UNG have the opportunity to participate in research projects in the Laboratory of Environmental and Life Sciences.

The links between the two institutions in the implementation of the doctoral Karstology program were strengthened when UNESCO recognized the Karstology study program as something exceptional in the world and named it the **UNESCO Chair on Karst Education in 2014**, which UNG conducts in close cooperation with the Institute for Karst Research ZRC SAZU and was the country's first UNESCO headquarters. There are around 850 UNESCO chairs in 135 countries around the world, 30 of them dealing with the environment and its protection in one way or another, 10 different Education Chairs, and only those presented have the word *kras* in their name.

➤ **Humanities (third level):**

The third-level doctoral program in Humanities is part of the humanities and social sciences field and focuses on three scientific fields: literary studies, history, and migration. Students in the field of literary sciences gain relevant, modern, methodological, theoretical, and new media knowledge for the study of literature or social issues as reflected in literary works as part of their studies. Students acquire relevant, modern methodological and theoretical knowledge as part of their migration studies in order to comprehend the phenomenon of migration and deal with modern migration processes and phenomena. The historical module's central question is how society and culture (in the broadest sense) function within the economic complex or how the economy works within the social and cultural context during the transition to a new and different social, economic, and cultural model and development pattern. Students in the Humanities program are qualified for further, independent professional and scientific research work after completing their studies, and are employable in domestic and foreign research institutions, as well as other institutions that require experts in the humanities and social sciences. Students work with mentors and researchers from UNG's Research Centre for Humanities on their research projects.

➤ **Cultural Heritage Studies (third level):**

The program is based on an interdisciplinary combination of basic scientific disciplines and professional competencies in the field of architectural, urban, and landscape heritage protection, planning, and management. Students participate in research at UNG on international projects in the field of landscape and cultural heritage conservation, as well as research with mentors from reputable foreign research institutions in this field.

The aim of the study is to interpret existing and explore new theoretical and methodological starting points that enable understanding of heritage values and the acquisition of specific knowledge required to cope with research and professional practice in designing innovative solutions in the field of heritage and its integration in an integrated modern and sustainable environment.

As part of their studies, students can focus on one of four areas: **ECONOMICS AND GOVERNANCE**, where they research legal, cultural, and economic criteria, restrictions, and institutions working in the field of cultural heritage protection, planning, and management.

TECHNIQUES AND MATERIALS, where they conduct research in the field of modern architectural heritage protection and planning, with a focus on material research, technical and technological knowledge of architectural heritage conservation.

SUSTAINABLE HISTORICAL BUILDING ENVIRONMENT, dedicated to research in the fields of integrated design, sustainable protection and management of larger areas of urban environment and cultural landscape, with a focus on integrated ecological design of heritage areas.

HERITAGE, CREATIVITY, AND TOURISM, which researches cultural heritage in relation to the creative industries and sustainable tourism.

We also run a doctoral double degree program in collaboration with the IUAV University of Venice. We are also collaborating with the IUAV University on a one-year development program (Master's Degree) in *Economics and Techniques of Architectural and Landscape Conservation*, which will result in a joint diploma certificate.

➤ **Molecular Genetics and Biotechnology (third level):**

The doctoral program in Molecular Genetics and Biotechnology is the result of cross-border molecular biology cooperation between the University of Nova Gorica and the International Centre for Genetic Engineering and Biotechnology (ICGEB) in Trieste. The program provides high-quality education for young professionals (Doctors of Science) who will be able to apply their knowledge of molecular biology and genetics in a variety of scientific, health, and environmental fields. They will apply their knowledge of new and advanced technologies in the field of industrial production of useful products as biotechnologists. Students will be involved in intensive research, seminar work, laboratory rotation, and critical and polemical participation in scientific discussions as part of the program. Students' doctoral research projects are usually a continuation of a larger research program of a selected research group in the Laboratory for Environmental and Life Sciences at UNG or in partner research groups in Slovenia and abroad. The program is implemented in close collaboration with the ICGEB of Trieste, which within the program provides both course holders and mentors to doctoral students, as well as the opportunity for students to perform research work within their research projects.

➤ **Cognitive Language Sciences (third level):**

The doctoral program Cognitive Sciences of Language is concerned with cognitive processes in the human brain and, as a result, the production and comprehension of natural language expressions. The study of these processes aids in answering scientific questions about the nature of thinking/brain activities (for example, what language knowledge is and how it is reflected in thinking/brain). At the same time, it provides us with practical knowledge that can aid in the design of intelligent machines capable of communicating in natural language and understanding natural language; it aids in the development of therapies for people with various speech impairments and the development of better language learning techniques.

The study program is intended to provide students with education and training in the core areas of formal linguistic theory, syntax, semantics, and phonology, all within the context of generative grammar. Furthermore, the program provides a selection of courses

addressing current trends in psycho- and neurolinguistics, as well as computational linguistics.

Students participate in research projects led by their mentors and lecturers from the Centre for Cognitive Language Sciences at UNG and other research groups worldwide in the field of cognitive language sciences.

➤ **Materials (third stage):**

Materials is an interdisciplinary doctoral program that combines expertise in physics, chemistry, chemical engineering, and theoretical chemistry. It is aimed at students who want to gain advanced research skills and knowledge in the development of various new types of functional materials. The study program is designed as a whole, from material synthesis and characterization to understanding the relationship between structure, material properties, and performance, as well as material development on an industrial scale. The study pays special attention to the development of new materials for use in energy and environmental technologies to meet the needs of industrial development. Students participate in the research activities of three UNG research units (Laboratory for Materials Research, Laboratory for Organic Physics, and Laboratory for Quantum Optics) as well as research laboratories of partner research institutions such as the Institute of Chemistry and the Jožef Stefan Institute in Ljubljana.

2. STRATEGY, INSTITUTE ORGANISATION AND MANAGEMENT, RECORD ORGANISATION, AND QUALITY CARE

2.1 ORGANISATION

The Graduate School is run by the Dean. The Rector nominates and appoints the Dean, with the approval of the University Senate and the Board of Directors. The term of office of the Dean is 4 years. After the term of office expires, the same person may be reappointed to the position of Dean.

Dean of GS: prof. dr. Iztok Arčon (term of office: 1. 10. 2014 - 1. 10. 2022).

Senate: The functions of the GS Senate are performed by the UNG Senate.

The Program Director is the professional manager of each postgraduate program. The University Senate appoints them on the recommendation of the Dean of the Graduate School.

GS Program Directors:

- **Environmental Sciences:** prof. dr. Anton Brancelj (term of office from 16. 1. 2013)
- **Physics:** izr. prof. dr. Gabrijela Zaharijas (term of office from 12. 3. 2020)
- **Karstology:** izr. prof. dr. Martin Knez (term of office from 16. 1. 2013)
- **Humanities:** izr. prof. dr. Ana Toroš (term of office from 16. 5. 2014)
- **Cultural Heritage Studies:** prof. dr. Saša Dobričić (term of office from 1. 10. 2010)
- **Molecular Genetics and Biotechnology:** doc. dr. Martina Bergant (term of office from 19. 1. 2017)
- **Cognitive Language Sciences:** prof. dr. Arthur Stepanov (term of office from 17. 5. 2013)
- **Materials:** prof. dr. Nataša Novak Tušar (term of office from 23. 1. 2019)

The Scientific Council is the expert-advisory body of the Program Director. It is made up of higher education teachers who participate in the implementation of an individual postgraduate program as lecturers or mentors. The Scientific Council may consist of 3 to 5 members. The members of the Scientific Council are appointed by the Program Director for a term of 4 years. Members of the Scientific Council may be reappointed at the end of their terms of office. The Scientific Council is chaired and convened by the Program Director.

Scientific Councils of GS programs:

- **Environmental Sciences:** prof. dr. Anton Brancelj, prid. prof. dr. Andrej Kržan, prof. dr. Mladen Franko, doc. dr. Martina Bergant Marušič, pridr. prof. dr. Valentina Turk (term of office until 15. 1. 2023).
- **Physics:** izr. prof. dr. Gabrijela Zaharijas, izr. prof. dr. Sandra Gardonio, prof. dr. Iztok Arčon, prof. dr. Gvido Bratina, prof. dr. Samo Stanič (term of office until 14. 3. 2024).
- **Karstology:** izr. prof. dr. Franci Gabrovšek, izr. prof. dr. Martin Knez, prof. dr. Metka Petrič, prof. dr. Tadej Slabe, prof. dr. Stanka Šebela (term of office until 6. 11. 2022).
- **Humanities:** izr. prof. dr. Marina Lukšič Hacin, pridr. prof. dr. Leonora Flis, izr. prof. dr. Aleš Vaupotič, pridr. prof. dr. Neva Makuc in izr. prof. dr. Ana Toroš (term of office until 8. 6. 2024).
- **Cultural Heritage Studies:** prof. Stefano della Torre, prof. dr. Arjo Klamer prof. dr. Xavier Greffe, prof. Benno Albrecht, prof. dr. Jukka Jokilehto, izr. prof. Saša Dobričič (term of office until 30.11.2023).
- **Molecular Genetics and Biotechnology:** prof. dr. Emanuele Buratti, prof. dr. Alessandro Marcello, izr. prof. dr. Ario de Marco and doc. dr. Martina Bergant Marušič (term of office until 13. 4. 2025).
- **Cognitive Language Sciences:** prof. dr. Penka Stateva, prof. dr. Franc Marušič, prof. dr. Artur Stepanov, doc. dr. Rok Žaucer (term of office until 20. 5. 2025).
- **Materials:** prof. dr. Iztok Arčon, prof. dr. Matjaž Valant, prof. dr. Nataša Zabukovec Logar, prof. dr. Nataša Novak Tušar (term of office until 31. 8. 2023).

GS Quality Coordinator:

- doc. dr. Martina Bergant Marušič, term of office until 13. 5. 2023.

Data on the library, publishing house, quality office, student office, finance department, legal department, human resources department, international department, and other administrative staff are shared by all UNG faculties and presented in the university's quality monitoring, assessment, and assurance report.

2.2 MISSION

The mission of the UNG Graduate School is to educate top experts who will be able to solve the most difficult tasks in research, development, entrepreneurship, or the social environment in Slovenia and internationally, as well as to create new knowledge in a

harmonious relationship between student professors and researchers, and to pass this knowledge on to younger generations and the business environment. Students are involved in research work within UNG research units or in partner research and higher education institutions and industry in Slovenia or around the world, which is a fundamental feature of UNG postgraduate study programs. As a result, conditions for the transfer of knowledge from an academic institution to an entrepreneurial environment are created, and graduates' employment opportunities are improved.

2.3 VISION

The Graduate School coordinates and implements all postgraduate doctoral study programs (third level) at the University of Nova Gorica. It is organised as a connected and unified postgraduate faculty. This enables great selectivity and interdisciplinarity in the design of individual doctoral study programs, as each student can select the most appropriate courses from the wide range of complementary study programs offered by the ECTS credit system.

The Graduate School' study programs are distinguished by their close collaboration with research laboratories, centres, or institutes of the University of Nova Gorica and other research institutions both at home and abroad. Postgraduate students can conduct research as part of their studies and participate in international research projects in these laboratories.

The Graduate School is thus more than just a place where study programs are carried out; it is also a creative environment where students, professors, researchers, and experts come together with the common goal of creating new knowledge and transferring it to the business environment. With such an organisation, the Graduate School ensures that its mission is effectively realized.

2.4 STRATEGIC PLAN

The GS strategic plan is a component of the university plan, which is known as the Program of Activities of the University of Nova Gorica: Development Plan for the Period 2010-2025. This is annexed to the 2009/2010 University Quality Report.

UNG will prioritize the development of Bologna second-level programs, doctoral programs, and scientific research in the future.

The short-term development strategy is discussed and adopted by the university's management (rector, vice-rector, deans and heads of research units). The UNG Strategic Conference in Vipava on 22. 2. 2018 identified UNG's strengths and the most pressing shortcomings in terms of strategic orientations adopted at the previous Strategic Conference. Simultaneously, the following decisions were made to improve UNG's activities in the coming period. Strategic decisions were made among them that are critical to the development of GS and the programs it implements.

UNG Status changes

- Identifying a strategic partner/donor for the development of UNG
- New co-founder - FUNG

Pedagogical activity

Acquiring students

- Increase the number of students by 20%
- Increase enrolment numbers at the II and III level
- Increase the number of outstanding students and consequently the transition to the 2nd year

Excellence of programs

- Increase the attractiveness and uniqueness of study programs
- Increase student participation in lectures by using interactive methods

Faculties

Graduate School

- Accreditation of the Level III Materials program
- ETCAEH - relocation to Vipava and preparation of three new development programs
- New cooperation agreement with a foreign university

Employability

- Maintain employability at 80% within 6 months after graduation or over 90% within 12 months after graduation

Balance between research and pedagogical work

- Approaching the ideal ratio of 50% of research work and 50% of pedagogical work for each employed researcher

Financing

- Acquisition of a concession for the entire UNG
- Look for external and foreign funding sources

Spatial planning

- Purchase of land or acquisition of building rights for campus and dormitory
- Construction of the Student Dormitory

In 2016, the GS adopted a special strategy for acquiring postgraduate students from abroad:

- We want to keep the share of foreign students above 50% and gradually increase it to 60%,
- We hope to attract foreign students from all over the world. The regional orientation is determined by the specifics of the content of each program (e.g., Karstology preferentially acquires students from countries with karst).

- The most effective way to attract foreign students is through mentors in the study program. Students choose to enrol because they want to work under the mentorship of a top expert in their field. As a result, we have prepared a presentation of mentors and their research areas for all GS programs on the website. Through personal connections with foreign research institutions, groups, or individuals, all mentors actively participate in the promotion and acquisition of foreign students.
- To attract more foreign students, we are developing joint doctoral programs with foreign universities. A joint ETCAEH development program with IUAV University is in the works, as is a joint doctoral program in Karstology with Yunnan University in China.
- We participate in joint UNG presentations at international fair events with promotional material (brochures, posters, e-presentations, etc.).
- Co-financing studies in the form of scholarships or employment in Slovenia could effectively increase the number of foreign students. We have noticed that many prospective students do not enrol because they do not have the financial means to support themselves while attending GS. We will actively promote all forms of co-financing available from the Slovenian government and the countries from which students come (international agreements, EU projects...). We will encourage collaboration with industries that are willing to invest in the education of doctoral students who conduct research with them during their studies. We already have some examples of this (Biomed from Trieste, Štore ironworks). As assistants, doctoral students will be able to participate in the pedagogical process at UNG in first and second level programs.

2.5 QUALITY ASSURANCE

The faculty adheres to the UNG's uniform methodology for quality assurance. Furthermore, at its 51st regular session on 11. 7. 2013, the UNG Senate committed to continuously developing a quality culture, ensuring the establishment of a quality loop, upgrading procedures and strategies for quality assurance, and continuous improvement in all of its activities. Quality assurance processes involve all stakeholders, including students. Quality assurance procedures, policies, and strategies at UNG are developed in accordance with national legislation as well as the recommended European standards and guidelines for quality assurance in higher education (*European standards and guidelines for internal quality assurance within higher education institutions, ESG, Part 1, ENQA, Helsinki, Finland, 2009, isbn 952-5539-05-9*), are formally adopted by the appropriate UNG bodies, and are made available on the UNG website.

The UNG Quality Rules of Procedure, which were adopted by the UNG Senate, outline quality assurance strategies at UNG, as well as procedures and mechanisms for monitoring, assessing, and ensuring quality at UNG, including self-evaluation procedures. The rules, responsibilities, working methods, and measures for monitoring and improving quality that the UNG's competent bodies and all other stakeholders in monitoring and quality assurance follow are defined.

Self-evaluations of GS doctoral study programs are carried out in accordance with the UNG Quality Rules and the National Criteria for Determining, Monitoring, and Assuring the Quality of Higher Education Institutions, Study Programs, Scientific Research, Artistic and Professional Work (Official Gazette of the RS, No. 124/04). The following is considered, as determined by the SQAA in accordance with the Higher Education Act: *Criteria for accreditation and external evaluation of higher education institutions and study programs, Criteria for transitions between study programs, Criteria for evaluating study programs for credit based on ECTS, Minimum standards for appointment to the positions of higher education teachers, researchers, and higher education associates at higher education institutions.*

Institutional and program self-evaluation of doctoral programs of the Graduate School, as presented in the self-evaluation report, addresses the following topics:

- Presentation of the program concept, vision, and goals of the study program, as well as presentation of a set of indicators for monitoring and evaluating achievement of the set goals.
- Analysis of the study program's implementation (compliance of the implementation with the accredited content and scope of the program, enrolment conditions, study methods, teaching methods, syllabus, course content, regular updating of course content, study schedule, methods of checking and assessing knowledge, ensuring appropriate electives within the program).
- Traceability of changes in study programs, where proposals for changes or updates to the program's content and structure, methods and forms of pedagogical work, and student work are provided.
- Monitoring and analysis of the implementation of student practical training in companies.
- Statistics of studies (information on studies before enrolment, enrolment in the first year, transition between years, success in courses, number of graduates and average length of study, differences between the number of students and teachers).
- Monitoring and promoting student mobility, as well as allowing electives within study programs via the ECTS credit system.
- Monitoring graduates' employability and gathering feedback from graduates on the application of acquired knowledge in the labour market.
- Academic and administrative staff structure (selection and habilitation of teachers, professional qualifications of administrative staff, ensuring an appropriate ratio between the number of teaching staff and the number of students, monitoring and promoting scientific and professional advancement or education of academic and administrative staff).
- Premises and teaching materials (lecture halls, computer room, library, study materials, websites, teaching equipment).
- Financing of study activities (resources, structure).
- Collaboration with the economy and integration into the regional and global environment.
- Student organisation.

- Using thematic student surveys, gather feedback from students on the program's content and implementation.
- Situational analysis and orientations.

In the 2016/17 academic year, Chapter 3.3 **Updating study programs** was added to the self-evaluation report in order to comply with the new legislation and the new Accreditation Criteria. This chapter presents all changes to the content of the faculty's study programs. For each academic year, the planned changes or updates to the program's content and structure, methods and forms of pedagogical work, and student work are given separately for each study program. Justifications are given for all changes. The final section is a chronological listing of the completed updates. A list of all changes to the study program approved by the Senate of the University of Nova Gorica during the academic year is provided. The list of changes is presented chronologically, with dates indicating admission to the Faculty Senate and the UNG Senate, as well as the date when the University notified SQAA of the adopted changes. The appendices to the self-evaluation report include the Senate decisions that were used to implement the changes, as well as a clean copy of the changes to the program and individual changed curricula of courses that show what has changed and what has remained the same as before.

The program's website on the UNG portal is where students and the general public can learn about the changes. At the end of this chapter's list of realized changes, there is a link to a website where students can be kept up to date on program changes.

The annual report on monitoring, assessment, and quality assurance also summarizes the findings on the study programs' strengths and weaknesses. Suggestions for improving the quality of study processes are also given. Every year, pedagogical staff make suggestions for improving the content and quality of the study program.

In the 2017/18 school year, we also included an in-depth analysis of the implementation of all doctoral programs in the Graduate School' self-evaluation report. The findings of the analysis are presented in the chapter **Implementation of study programs**, subchapter **Assessment of the situation and orientations**.

The following program self-evaluation segments are covered in the analysis:

- The relevance of the existing program's contents, as well as the incorporation of new knowledge gained through scientific research, professional or artistic work, and other achievements in the field of study.
- Coherence of the proposed changes with the vision and development strategy of the faculty and the University.
- Connection of the study program's contents, their relationship to useful or basic knowledge in the field and discipline, and conceptual selection of contents that are clearly defined and meaningfully related to the current situation and development trends in science, profession, or art.
- The consistency and content connection (compliance) of the curricula's goals, competencies, or learning outcomes with the goals and competencies of the study program and its content according to the type and level of study.
- Order of courses or distribution by semesters and years (horizontal and vertical connection), as well as credit evaluation.

- Adequacy of study program implementation, methods and forms of pedagogical work, and student work. (Conditions for practical education of students especially in professional study programs.)
- Adequacy of study materials, introduction of electronic study materials for e-study and distance learning, or other forms of study adapted to students with special needs.
- Evaluating student workload, progress, and completion of studies.
- Obtaining competencies or learning outcomes as planned.
- Adequacy of knowledge testing and assessment.
- Enrolment analysis.
- Verification and analysis of graduate employability.
- Identifying new knowledge needs and employment opportunities in the environment, labour market needs, or societal knowledge needs.

Based on these analyses, it is determined whether future changes and additions to the content and/or method of implementation of study programs are required.

All updates based on analyses are listed in the chapter Updating the content of study programs. All documents on changes in faculty programs approved by the UNG Senate are attached as an appendix to the self-evaluation report.

At the level of UNG, the UNG Quality Commission is responsible for carrying out activities related to monitoring and quality assurance at UNG, evaluating the situation and submitting proposals and initiatives for the development of quality culture and upgrading quality assurance procedures and strategies, and quality coordinators are in charge at faculties, academies, and colleges, who are also members of the UNG Quality Commission. The UNG Quality Commission reports to the University Senate once a year on its activities. The Dean appoints the GS Quality Coordinator, who is then approved by the UNG Senate, which serves the same purpose as the GS Senate.

The obtained results are discussed by the Dean of each faculty and the Faculty Senate. The Senate of each faculty or school monitors the conditions of study and makes recommendations for improvements to the Rector and head of the University of Nova Gorica. The results of the analyses are also summarized in a short report, which is included in the University of Nova Gorica's annual report on monitoring, assessment, and quality assurance. This report is considered by the Senate of the University of Nova Gorica. The findings are incorporated into the annual work plan.

Employees of the University of Nova Gorica actively participate as external evaluators in the process of ensuring the quality of higher education in Slovenia. The National Commission for Quality Assurance in Higher Education had two representatives from UNG. The President of the University Quality Commission is a member of the University Quality Commissions' working group. UNG is also actively involved in the process of adapting and harmonizing Slovenian higher education with the principles and guidelines of the Bologna Declaration.

In addition to standard indicators, we monitor the quality of postgraduate students' research work. The Senate of the University of Nova Gorica adopted uniform formal procedures for applying for and presenting a doctoral dissertation at GS at its 8th session on May 16, 2007.

The UNG Senate adopted amendments to the study rules (item 2a) at its regular 16th session on May 21, 2008, and amendments to the rules at its regular 32nd session on September 15, 2010 (items 2a, 2b, 3e, 3f, and 3g), and at its 50th regular session on May 16, 2013. (items 3d, 3e, 3f and 3g). To ensure quality and in accordance with the EAU's recommendations, the Senate adopted additional amendments to the study rules during its regular 73rd session on 21. 9. 2016. The most recent amendments (items 1c, 2c, and 3h) were approved by the UNG Senate at its 88th session on 13. 3. 2019, and by the Board of Directors at its 55th session on 3. 4. 2019.

The latest amendments to the study rules in the Graduate School' doctoral programs, as outlined in the *Formal Procedures for Applying for and Presenting a Dissertation*, concern:

- The composition of the dissertation evaluation commission, which must include at least two members from a foreign university.
- Amendments to the Design and Submission of the dissertation, including the addition of a copyright statement.
- The elimination of the rules governing the old scientific master's degree, which no longer exists.
- The instructions for submitting the dissertation are supplemented in point 3 of the *Formal Procedures*, as indicated in the attached document. In cases where the members of the commission identify deficiencies in the dissertation and recommend their elimination, the individual steps in the process of reviewing the dissertation are specified in greater detail.
- Point 1b includes the conditions for appointing mentors to doctoral students as well as a list of the main tasks or responsibilities of mentors to students.

"A doctoral student's mentor can be a habilitated higher education teacher (assistant professor, associate professor, or full-time professor) or a doctorate-holding researcher who is active in research and professionally in the field covered by the dissertation topic. The student may also select a mentor who is not an employee of UNG. The mentor must provide appropriate professional assistance and advice to the student in the preparation of the dissertation, both in terms of content and design, as well as professional language."

- The provisions in existing Formal Procedures points 2a and 2b, which determine the language of the dissertation, are amended as follows:

Article 2a) The dissertation is written in English.

Article 2b) The dissertation may be written in two languages, English and Slovene, or a longer summary in Slovene may be attached to the English dissertation.

Explanations regarding the language of the dissertation:

2a) The dissertation is written in English to ensure that all doctoral students in all GS doctoral programs acquire appropriate language competencies during their studies in order

to present the results of their research work to the international professional public in English. All of UNG's doctoral programs are internationally oriented, in keeping with the university's vision and strategy. Aside from Slovenian students, more than 50% of all foreign students enrolled in various language fields from around the world enrol in GS doctoral programs. We expect all students to demonstrate a general level of English language skills at least at level B2 when they enrol in doctoral programs, and we expect them to upgrade their English language skills during their studies to an appropriate level that allows independent presentation and application of research results in English.

The entire text of the dissertation must be linguistically appropriate. The English text must meet the language standards for scientific publications in English in international scientific journals.

The mentor must provide the student with appropriate professional assistance and advice in terms of content, design, and language when preparing the dissertation.

A three-member commission for the presentation of the dissertation, appointed by the UNG Senate, oversees the quality of the dissertation in terms of content and language. To ensure international comparability of dissertation quality, the commission always includes at least one member from a foreign university. Members of the commission from foreign universities do not usually understand Slovene, so it is critical that the dissertation be written in English so that foreign members of the commission can properly check and evaluate it, both in terms of content and English appropriateness.

2b) The dissertation may be written in two languages, English and Slovene, or a longer summary in Slovene may be attached to the English dissertation. In this way, we hope to enable students from the Slovene-speaking field to present and professionally substantiate the results of their research work in their native language. This is especially important when the dissertation's research topic is closely related to the Slovene language, Slovene space, and people in Slovene-speaking areas, or to research sources in Slovene. (In accordance with the UNG strategy, which aims to cultivate specific research and pedagogical activities that will strengthen the position of Slovenes on the westernmost ethnic border.)

The text of the dissertation in the Slovene language must be linguistically appropriate. It must adhere to the Slovene standard language rules. Appropriate Slovenian scientific or professional terminology must be used. The mentor must provide appropriate professional assistance and advice to the student in the preparation of the dissertation and the appropriate use of Slovenian scientific or professional terminology, as well as in adhering to the Slovene standard language rules, when writing the Slovene text in the dissertation.

The members of the dissertation presentation commission who speak Slovene in terms of content and language supervise the professional suitability of the Slovene language and the scientific quality of the Slovene text included in the dissertation.

Dissertation presentation admission requirements

In order to improve the quality of studies at GS, the Senate of the University of Nova Gorica decided to amend the Dissertation presentation admission requirements in doctoral study programs at the Graduate School at its 47th regular session on 7 November 2012, as follows: *"As a dissertation presentation admission requirement, in addition to the*

applicable provisions in the study program, the student must show a grade of 8 or higher in all courses taken in the study program and graded using the existing numerical grading scale." The stated dissertation presentation admission requirements are also considered in the procedure of recognizing ECTS credits for study contents completed by the student prior to enrolling in the doctoral program at GS. Therefore, only courses in which the student received at least 70% of the maximum grade, i.e., at least an 8 on the Slovenian grading scale of 1 to 10, can be recognized. The changes were incorporated into the description of the course Dissertation in all doctoral programs and are effective beginning with the 2012/2013 academic year. The general competence in English language acquisition is also added to the course description, so that students can present their research results to the international public in English independently and sovereignly.

On 20. 1. 2016, the Senate of the University of Nova Gorica adopted an additional amendment to the Graduate School' existing study rules, which apply to all doctoral programs, during its regular 69th session. The amendment states: *"In addition to the applicable provisions in the study program, the student must submit one scientific article in the field of their research conducted during the doctoral study program as a dissertation presentation admission requirement. The article must be written in one of the commonly used foreign languages* and submitted to or accepted for publication in an international scientific journal with a high impact factor. In the field of humanities and social sciences, international journals specified in the minimum bibliographic conditions for election to pedagogical titles in the field of humanities and social sciences at the University of Nova Gorica are deemed appropriate."*

*Common foreign languages include: English, Spanish, French, German, Russian, Chinese and Japanese.

The changes were incorporated into the description of the course Research Work III in all doctoral programs and are effective beginning with the 2016/2017 academic year.

Instructions to mentors

In order to improve quality and in accordance with EUA recommendations on mentor education (particularly external), GS prepared instructions for doctoral student mentors in the 2015/16 academic year, which are now available on the Faculty's website. The instructions are as follows:

"A doctoral student's mentor can be a habilitated higher education teacher (assistant professor, associate professor, or full-time professor) or a doctorate-holding researcher who is active in research and professionally in the field covered by the dissertation topic. The student may also select a mentor who is not an employee of UNG.

One or two mentors may be assigned to a student. When the dissertation topic is interdisciplinary in nature and one mentor cannot provide adequate professional assistance for all areas covered by the topic, two mentors are recommended. If the candidate has two mentors, they are both in the same position and have the same responsibilities to the student.

The mentor provides appropriate professional assistance and advice to the student in the preparation of the dissertation, both in terms of content and design, as well as professional language.

The mentor cannot be a member of the dissertation evaluation committee. According to their role, they are present at the dissertation presentation but do not have the right to evaluate it.

When enrolling in the study program at the beginning of the first year, the student chooses a work mentor and informs the study program's director of their choice. The work mentor advises the student in the selection and definition of the research field of the dissertation, and in accordance with this choice, advises the student in the selection of appropriate elective courses in the study program, right from the start of the study.

The mentor (or mentors) is officially appointed by the UNG Senate on the recommendation of the study program's director and with the approval of the program's Scientific Council. The Senate appoints a mentor along with the members of the dissertation evaluation committee and confirms the suitability of the title and topic of the dissertation proposed by the student in agreement with the working mentor. The student submits a dissertation topic proposal with justification for approval later in the second year, in accordance with the procedures outlined in the Formal procedures for applying and presenting a dissertation."

Involvement of students in the quality process

At various levels, students are involved in the process of monitoring and ensuring the quality of postgraduate study programs. On the one hand, the UNG Student Council facilitates collaboration between GS and students. Students also have representatives on the UNG Board of Directors, Senate, and the University Quality Commission. Through student surveys, all GS students directly participate in monitoring and ensuring the quality of the pedagogical process.

The following thematic surveys are used to collect students' opinions on the quality of the program's content and implementation:

- student survey to assess the quality of lectures of individual lecturers,
- student survey for the evaluation of the study program,
- student workload survey.

The surveys are completely anonymous.

We collect student opinions on the quality of pedagogical work in individual courses on a regular basis through *Student Surveys to assess the quality of lectures*. Two versions of student surveys have been developed for this purpose: one is designed to assess the quality of pedagogical work of lecturers who teach the course *in the form of regular lectures*, and the other is used when the lecturer conducts the course *in the form of individual consultations* (when less than five students enrol in the course). Students at the end of the lectures before the exam period. At the end of each lecture and before the examination period, students evaluate the pedagogical work of each lecturer and assistant using the

UNG electronic system. Since 2015/16, this survey has been administered in all UNG programs in a revised format that is much simpler and makes assessing pedagogical work easier.

The survey results are not made public; only the school administration has access to them. Each teacher has access to the results of a survey about their work. This information provides feedback to teachers on their work. They draw attention to the weaknesses and strengths of the pedagogical process as perceived by students and thus encourage them to improve their pedagogical work. The Dean of the faculty and the president of UNG conduct individual interviews with lecturers at the end of the academic year, and the results of the surveys serve as a starting point for finding improvements in the pedagogical process. The results of these surveys are used to issue and use student opinions on the pedagogical work of lecturers in the process of election to pedagogical titles.

Additional feedback on the study program is obtained through the *Study Program Assessment Survey*, which includes questions about the library, computer classrooms, secretariat and student office, student council, and extracurricular activities of students, in addition to questions about the study program. Every year, when students enrol in higher years, a survey is conducted. Based on the survey results, the faculty attempts to eliminate potential weaknesses while retaining the positive aspects of the study program. This survey was also renewed in the 2015/16 academic year.

Following the introduction of a new study program, the actual student workload is evaluated every academic year until the graduation of the first enrolled generation, and then at least every two years, in accordance with *Criteria for credit evaluation of study programs according to ECTS*, adopted by the SQAA Council at its 11th session on 18 November 2010. The *Student Workload Survey* is used to evaluate students immediately after they pass their exams. Students complete it using the UNG electronic system after passing an exam for each course or other study unit, which is graded with ECTS credit points. Since 2014/15, this survey has been conducted in all UNG programs in a revised form that is much simpler and makes assessing students' workload in individual courses easier.

The Alumni Club, which unites graduates, master's, and doctoral students from all UNG study programs, was founded in 2004. UNG hired a coordinator in 2011 to oversee the activities of the UNG Alumni Club. Feedback on the employability of graduates and the relevance of knowledge acquired in UNG study programs can be obtained from club members.

2.6 RENEWAL OF DOCTORAL STUDY PROGRAMS

Six GS doctoral programs were renewed as part of the project *Upgrading the Quality Assurance System and Renewal of the Program Offer at the University of Nova Gorica*, which was approved for funding in September 2013. Based on the findings of the program analysis, which were collected in the GS and UNG self-evaluation reports, updates to these study programs were made, and a proposal was made to rationalize the implementation

and, if necessary, change the syllabus. We focused on updating the content of existing courses, clearly defining learning outcomes, and adjusting the methods of testing knowledge, as well as updating the methods of program implementation by introducing modern teaching and e-learning methods. We will incorporate elements of distance learning as a supplement to traditional forms of teaching, making studies more accessible to students with special needs. We also included lifelong learning content in our study programs, which contributed to improved opportunities for retraining and employment for the elderly, who require new competencies due to job loss or the pursuit of new career paths. We updated the program and course presentations, learning outcomes, literature, learning methods, and knowledge assessment.

We also considered the principles of economy and sustainability in the implementation of study programs in the updates. We looked for ways to rationalize the implementation without sacrificing the quality of the implementation or the learning achievements and competencies of students or graduates, as provided in the programs. Possible solutions include the elimination of elective courses whose content is no longer relevant, as well as the cyclical implementation of elective courses every other academic year, so that students from two generations can listen to the offered elective course together; combining the implementation of common learning contents in related courses with the joint offering of elective courses in several different study programs of the same level, resulting in a reduction in the total number of elective courses. We improved the ability to implement some content remotely, as well as the quality of communication between students and experts and professors from other countries, which improved the quality of knowledge transfer and reduced the cost of implementing programs.

We renewed the programs Molecular Genetics and Biotechnology, Linguistics and Humanities in the 2013/14 academic year, Physics in 2014/15, and Economics and Techniques of Architectural and Landscape Heritage in 2017/18. In the 2019/2020 academic year, the Physics program was also partially renewed.

During the 2016/2017 academic year, the UNG Senate decided to extend all doctoral programs from three to four years. The decision applies to all students who enrolled for the first time in 2017/2018.

Since the 2016/2017 academic year, following the adoption of the new Higher Education Act in December 2016, universities in Slovenia have had full autonomy in redesigning their study programs, and are thus responsible for ensuring program quality and development. In this context, GS evaluates and updates the content, composition, and implementation of all of its study programs on a regular basis. This process includes students as well as external stakeholders (employers, representatives of the local and wider social environment). All changes and updates are based on the results of the program analyses.

In Chapter 2.5, the methodology for monitoring, evaluating, and updating the content and implementation of study programs is presented. Chapters 3.2–3.6 present the analysis and findings of the evaluation of study programs (Assessments of the situation and orientations).

Chapters 3.7–3.9 **Updating study programs** provides information on all changes in the content of study programs implemented by the faculty over the last three years. The planned changes or updates to the program's content and structure, methods and forms of

pedagogical work, and student work are given separately for each study program. Justifications are given for all changes. The final section is a chronological listing of the completed updates. A list of all changes to the study program adopted and approved by the Senate of the University of Nova Gorica during the academic year is provided. The list of changes is presented chronologically, with dates indicating admission to the Faculty Senate and the UNG Senate, as well as the date when the University notified SQAA of the adopted changes. It is also stated when the confirmed changes will take effect and which generation of students will be affected.

The program's website on the UNG portal is where students and the general public can learn about the changes.

2.7 STUDY RULES AT GS

The Senate of the University of Nova Gorica adopted the GS study rules, which govern the formal procedures for applying for and presenting a dissertation, at its regular 8th session on 16. 5. 2007. The UNG Senate adopted amendments to the study rules (item 2a) at its regular 16th session on 21. 5. 2008, and amendments to the rules (items 2a, 2b, 3e, 3f, and 3g) at its regular 32nd session on 15. 9. 2010, at its 50th session on 16. 5. 2013 (items 3d, 3e, 3f, and 3g), and at its regular 73rd session on 21. 9. 2016. The most recent amendments (items 1c, 2c, and 3h) were approved by the UNG Senate at its 88th session on 13.3. 2019, and by the Board of Directors at its 55th session on 3. 4. 2019.

All of the GS study rules are available on the GS website:

<http://www.ung.si/sl/studij/fakulteta-za-podiplomski-studij/>

The following are the key documents that govern the study rules in all GS doctoral programs.

Formal procedures for applying to and presenting a dissertation include the following:

1) Appointment of the work evaluation commission and approval of the dissertation title and topic

- a) The candidate must submit a proposal for the dissertation title and topic, along with justification, to the GS secretariat by the end of the second year. The working mentor of the candidate also signs the proposal of the dissertation title of the dissertation topic.

If the works refer to results or data that have the character of industrial property and are the property of a company, the student must obtain the consent of this company, which also determines the manner and conditions of use of this industrial property. Before approving the title and topic of the dissertation, permission must be obtained.

If the student and work mentor do not want to publish the work, they must submit a written request with justification along with the application for approval of the dissertation title and dissertation topic.

(If more than five and a half years have passed since enrolling in the doctoral program, the candidate must first submit an application for approval to continue their studies. The application is reviewed by the Scientific Council and the director of the study program, who determine whether the student's previous work and obtained ECTS credits are still relevant. If these contents are no longer relevant to the current study program, the student is assigned additional obligations in the appropriate range of ECTS credits, which must be completed before graduation.)

- b) The director of the study program, with the approval of the program's Scientific Council, proposes a commission to evaluate the dissertation and appoints one or two mentors in this proposal. When the dissertation topic is interdisciplinary in nature and one mentor cannot provide adequate professional assistance for all areas covered by the topic, two mentors are recommended. If the candidate has two

mentors, they are both in the same position and have the same responsibilities to the student.

A doctoral student's mentor can be a habilitated higher education teacher (assistant professor, associate professor, or full-time professor) or a doctorate-holding researcher who is active in research and professionally in the field covered by the dissertation topic. The student may also select a mentor who is not an employee of UNG.

The mentor must provide appropriate professional assistance and advice to the student in the preparation of the dissertation, both in terms of content and design, as well as professional language.

- c) The dissertation evaluation commission is composed of three members, at least two of whom must be from a foreign university and one of whom is typically from UNG or another Slovenian university. All members must be habilitated higher education teachers with the appropriate title, as well as experts in the field of the dissertation topic.
- d) The mentor cannot be a member of the dissertation evaluation committee. According to their role, they are present at the dissertation presentation but do not have the right to evaluate it.
- e) The director of the study program submits to the UNG Senate a proposal for the dissertation title, a proposal for the dissertation evaluation commission, and a proposal for mentors. The proposal is signed by the Dean of GS as well as the director of the study program. The proposal is accompanied by the student's topic justification.
- f) The UNG Senate approves the title and topic of the dissertation, as well as the work evaluation commission and mentors.

2) Dissertation design:

- a) The dissertation is written in English.
- b) The dissertation may be written in two languages, English and Slovene, or a longer summary in Slovene may be attached to the English dissertation.
- c) The form and elements of the dissertation's title page, as well as the text of the copyright notice, are prescribed. The sample is available at the GS secretariat, doctoral study program secretariats, and the UNG University Library.
- d) The dissertation is printed on both sides of A4 paper with margins (inner margin 3.5 cm, upper and outer margin 3 cm, lower margin 2 cm).
- e) Format Recommendation: Font size is 12 pt.; Font is Times New Roman or similar. Lines should be spaced one and a half spaces apart. The text should be centre aligned. The pages should be numbered in the middle of the page, at the bottom margin. The title page should not be numbered.
- f) Covers for binding the dissertation are prescribed. The candidate receives ten free covers and more for a fee. The candidate binds the book at their preferred bookbindery. It is important, however, that the letters on the cover meet the requirements of UNG.
- g) The title, short summary, and keywords in English and Slovenian are required components of the dissertation. The entire text of the dissertation must be

linguistically appropriate. This applies to the English text, which must meet the language standards for scientific publications in international scientific journals in English, as well as the Slovenian text included in the dissertation, which must follow Slovene literary language rules and use appropriate Slovene scientific or professional terminology.

- h) The mentor confirms that the dissertation is properly prepared in terms of content, design, and (professional) language by signing, and that the student is allowed to submit the dissertation.

3) Dissertation submission:

- a) The student first submits the final version of the dissertation in electronic form (pdf format) to the GS secretariat, with the written consent of the mentor.
- b) The Secretariat submits the dissertation to the dissertation evaluation committee. Within one month, each member of the commission must submit a written opinion on the work.
- c) The evaluations of the commission members are reviewed by the study program's director and Scientific Council. If the commission members identify deficiencies in the dissertation's content or language, or recommend corrections and additions to the dissertation, the director of the study program notifies the student and mentor in writing that the student must supplement and correct the dissertation. The student submits the final revised version of the dissertation to the GS secretariat in electronic form, with the mentor's written consent. The secretariat submits the revised and supplemented dissertation for re-examination to the dissertation evaluation committee. Each member of the commission who recommended the elimination of deficiencies in the dissertation during the evaluation must communicate in writing within fifteen days whether their comments were properly considered and whether the final version of the dissertation is suitable for presentation. The GS Secretariat notifies the student, mentor, and program director of the final opinions of the committee members. Opinions are reviewed by the director and the Scientific Council of the study program.
- d) If the director and the Scientific Council of the study program determine that all opinions are positive, the director of the study program proposes to the UNG Senate that the dissertation be presented. The proposal is also signed by the Dean of GS. The proposal is accompanied by all of the commission members' opinions on the presentation of the dissertation.
- e) Opinions of commission members may also be negative. A negative opinion is one in which the reviewer believes that the comments from the first conditionally positive opinion were not taken into account. If two of the three opinions are negative, the dissertation is deemed negative, and the procedure is completed. In the event of a single negative opinion, the UNG Senate, on the recommendation of the Scientific Council and the program director, appoints a fourth independent reviewer and a member of the commission to provide an additional opinion. If the independent reviewer's opinion is positive, the procedure is repeated, as in the case of three positive opinions. In the event that an independent reviewer expresses a negative opinion, the dissertation is assessed as negative, and the procedure is completed.

- f) If all opinions are positive, the mentor signs the application for dissertation binding approval, which the student submits to the secretariat.
- g) According to the Instructions for the preparation and submission of electronic diploma, master's, and doctoral theses, the student submits the dissertation in electronic form in the University of Nova Gorica repository.
- h) The covers used to bind the dissertation are uniform and predetermined. When a signed statement from the mentor stating that the dissertation is ready for submission is submitted, each student receives ten free copies of the cover from the University of Nova Gorica. To apply for a dissertation, students must submit a certificate from the student office stating that they have completed all exams and other study obligations, a certificate of settled obligations at the University Library of Nova Gorica, and a statement of authorship, electronic and printed versions of the doctoral thesis, and publication.
- i) The student sends the GS secretariat ten bound copies of the dissertation. The secretariat forwards the bound version of the dissertation to the commission.

4) Dissertation presentation:

- a) The UNG Senate considers the proposal for dissertation presentation and makes an appropriate decision.
- b) A presentation is announced and carried out as a result of a positive decision by the UNG Senate.
- c) The candidate publicly presents their dissertation to the commission. The presentation is directed by the study program's director. The presentation is set up so that the student can publicly present their work in 45 minutes. The questions of the commission, the mentor and the listeners follow. The commission then withdraws and gives an assessment of the presentation. The presentation is completed by entering it in the University of Nova Gorica's book of doctorates.
- d) With the successful presentation of the dissertation, the student completes the doctoral study and meets the final requirement for obtaining a doctorate degree (Doctor of Science). At a formal ceremony, the Rector of the University of Nova Gorica confers the title of Doctor of Science on a student.

The Senate of the University of Nova Gorica decided to amend the Dissertation presentation admission requirements in doctoral study programs at the Graduate School at its 47th regular session on 7 November 2012, as follows: *"As a dissertation presentation admission requirement, in addition to the applicable provisions in the study program, the student must show a grade of 8 or higher in all courses taken in the study program and graded using the existing numerical grading scale."* The stated dissertation presentation admission requirements are also considered in the procedure of recognizing ECTS credits for study contents completed by the student prior to enrolling in the doctoral program at GS. Therefore, only courses in which the student received at least 70% of the maximum grade, i.e., at least an 8 on the Slovenian grading scale of 1 to 10, can be recognized. The changes became effective at the start of the 2012/2013 academic year.

On 20.1.2016, the Senate of the University of Nova Gorica adopted an additional amendment to the existing study rules of the Graduate School, which apply to all doctoral

programs, during its regular 69th session. The amendment states: *"In addition to the applicable provisions in the study program, the student must submit one scientific article in the field of their research conducted during the doctoral study program as a dissertation presentation admission requirement. The article must be written in one of the commonly used foreign languages* and submitted to or accepted for publication in an international scientific journal with a high impact factor. In the field of humanities and social sciences, international journals specified in the minimum bibliographic conditions for election to pedagogical titles in the field of humanities and social sciences at the University of Nova Gorica are deemed appropriate."*

*Common foreign languages include: English, Spanish, French, German, Russian, Chinese and Japanese.

On 13. 3. 2019, the Senate of the University of Nova Gorica adopted an additional amendment to the existing rules governing the composition of the doctoral dissertation evaluation committee during its regular 88th session. The amendment states: *"The dissertation evaluation commission is composed of three members, at least two of whom must be from a foreign university and one of whom is typically from UNG or another Slovenian university. All members must be habilitated higher education teachers with the appropriate title, as well as experts in the field of the dissertation topic."*

Procedures for examination approval and the recognition of ECTS credits for obligations completed outside of the enrolled doctoral study program of the third level, within other GS programs, or in doctoral programs outside the University of Nova Gorica.

A student enrolled in any third-level doctoral program at the University of Nova Gorica's Graduate School may complete an elective part of organised forms of study obligations outside the study program during their studies.

- The student may select elective courses from other study programs within the GS in the total amount of up to 30 ECTS credits.
- The student can choose courses from other accredited doctoral programs at other universities in Slovenia or abroad within this elective (up to 30 ECTS), but not more than 24 ECTS, which is 40% of the 60 ECTS provided for organised forms of study. A student can earn some of these 24 ECTS by attending summer schools or other programs that do not have units evaluated according to the ECTS system, but only up to 10 ECTS, which is the legal limit for free electives in organised forms of study.

Taking exams in other study programs within the GS

The student may select elective courses from other doctoral programs within GS in consultation with the mentor and the director of the study program, and, if the mentor has not yet been selected, in consultation with the director of the study program. Outside of the program, the set of exams is confirmed in writing by the mentor and the program director, or only by the study program director if the mentor has not yet been selected. The student's personal file in the student office contains written consent from the program director (and, if applicable, the mentor) to the selection of electives.

Taking exams outside UNG

When selecting courses taken outside of UNG, the following must be considered:

- the contents of the selected courses must be relevant to the student's doctoral orientation;
- cannot obtain similar content within the GS doctoral programs;
- their mentor must approve their course selection in writing in advance;
- to take exams outside of UNG, the student must obtain written permission from the scientific council of the doctoral program in which they are enrolled;
- if the examination outside the UNG must be paid for, the University of Nova Gorica may cover the cost of the examination up to the proportional share of tuition fees at the University of Nova Gorica, depending on the number of ECTS credits. The academic council of the program in which the student is enrolled must approve payment for the UNG exam in advance. In case of failing the exam, the student covers the costs of taking the exam.

(Generally, our students take exams at another Slovenian university on the basis of reciprocal exchange, without mutual charging, as part of an interuniversity student exchange agreement.)

When exchanging students through the ERASMUS system, a tripartite agreement signed by both universities and the student traveling on the exchange determines in advance what contents or courses the student will complete on the exchange and the extent to which ECTS will be awarded. This knowledge is recognized by the program as a completed study obligation for the student.

Other forms of teaching outside the UNG, and their recognition and credit evaluation

Other forms of teaching outside the UNG are implemented in summer schools or other programs that do not have study units evaluated according to the ECTS system using the following procedure:

- Following completion of such teaching, the student submits a request to the program's Scientific Council for recognition of acquired knowledge and competencies, as well as for the evaluation of these contents with ECTS credits. The application must be accompanied by written evidence of the content of such teaching and a certificate of successful completion. If the teaching did not include a knowledge test, the student must also submit their own written report on the teaching (seminar paper, article...), which will be used by the program's Scientific Council to determine whether the student has acquired the necessary knowledge and competencies.
- The Scientific Council of the program or the expert commission of higher education teachers from the program appointed for this purpose by the program's director, checks on the basis of documented evidence whether the acquired knowledge and competencies correspond to general or course-specific competencies specified in the study program, evaluates this knowledge according to ECTS, and proposes to the Senate of the University of Nova Gorica that this knowledge be recognized as a completed study obligation in the program.
- The UNG Senate makes decisions on ECTS competency and credit recognition based on a proposal from the Scientific Council and the director of the study program, as well as in agreement with the Dean of the Graduate School.

Recognition of ECTS credits for study content completed prior to enrolment in the doctoral program at GS.

Recognition of acquired knowledge acquired by students in other accredited doctoral study programs at other higher education institutions using the ECTS credit system is done in accordance with the *Criteria for transitions between study programs* and *Criteria for evaluating study programs for credit based on ECTS*, adopted by the SQAA. The EU's guidance on the use of the ECTS system, as set out in the UNG Quality Rules (ECTS users guide, Brussels, 6 February 2009, available at http://ec.europa.eu/education/lifelong-learning-policy/doc48_en.htm), shall apply mutatis mutandis to recognition procedures.

The procedure for recognition is as follows:

- The student submits an application to the director and the scientific council of the doctoral program for recognition of knowledge gained in other programs and qualifications.

- The Scientific Council, or a specially appointed expert commission of higher education teachers from the program appointed by the program director, evaluates the adequacy and relevance of acquired competencies and learning outcomes, as well as whether they correspond to general or course-specific content competencies determined by the individual study program. Furthermore, the provision adopted by the UNG Senate is taken into account, *which states that a student must, in addition to the applicable provisions in the study program, demonstrate a grade of 8 or higher in all courses taken in the study program using the existing numerical rating scale as a condition for admission to the presentation of the dissertation.* Therefore, only courses in which the student received at least 70% of the maximum grade, i.e., at least an 8 on the Slovenian grading scale of 1 to 10, can be recognized.
- Based on these findings, they submit to the UNG Senate a proposal for the recognition of acquired knowledge as a completed study obligation in their own study program, as evaluated according to ECTS. It is also determined which contents the student must still complete in the program, and which contents the student does not have to complete in their own program because they have been adequately replaced by recognized knowledge acquired elsewhere.
- The UNG Senate makes decisions on ECTS competency and credit recognition based on a proposal from the Scientific Council and the director of the study program, as well as in agreement with the Dean of the Graduate School.

Similarly, prior knowledge, competencies, qualifications, or abilities acquired through non-formal learning or in summer schools or other programs that do not have study units evaluated according to the ECTS system are recognized. The Scientific Council of the program or the expert commission of higher education teachers from the program appointed for this purpose determines, based on documented evidence, whether the acquired knowledge and competencies correspond to the general or course-specific competencies specified in the study program according to ECTS and proposes to the Senate of the University of Nova Gorica that this knowledge be recognized as a completed study obligation in the program. The UNG Senate makes decisions on ECTS competency and credit recognition based on a proposal from the Scientific Council and the director of the study program, as well as in agreement with the Dean of the Graduate School.

The Senate of the University of Nova Gorica adopted procedures for approving examinations outside the enrolled third-level doctoral study program, within other GS programs, or in doctoral programs outside the University of Nova Gorica at its 47th regular session on November 7, 2012.

3. EDUCATION, STUDY ACTIVITIES

3.1 IMPLEMENTATION OF STUDY PROGRAMS

Introduction

During the academic year 2020/2021, the University of Nova Gorica's Graduate School offered the following postgraduate study programs: *Environmental Sciences, Physics, Karstology, Humanities, Cultural Heritage Studies, Molecular Genetics and Biotechnology, Cognitive Language Sciences, and Materials*. During this academic year, 60 students were enrolled in all study programs, demonstrating the general interest in the offered postgraduate study programs at GS. After a few years, the number of students has increased again.

Data on student success in both study and individual research work demonstrate that all programs are implemented successfully, with quality and efficiency. Students' average grades are higher than 9, and they typically pass exams in the first attempt. The average period of study is improving. Students usually complete their studies by presenting their dissertation within a year of finishing their studies. A slightly longer study period is understandable given that a significant proportion of doctoral students are employed in various external companies and institutions and must perform official duties in addition to their study obligations. The success of postgraduate studies is also reflected in the successful presentation of high-quality doctorates and master's theses, as well as the numerous publications of student research findings in prestigious international journals. We recorded 61 scientific and professional articles, 9 published conference papers, 68 published conference abstracts, and 13 other publications in 2020 and 2021, indicating the quality of student research work. This figure excludes publications by students who have recently completed their studies but are still publishing works related to their research in the context of doctoral theses.

The University of Nova Gorica promoted nine Doctors of Science in 2020/2021. The commission for the presentation of the doctoral thesis always includes at least one member from a foreign university (two members since 2019), ensuring that the quality of master's and doctoral theses is comparable to global standards. These achievements undoubtedly attest to the high quality and relevance of the content and teaching methods available in our postgraduate study programs.

Conducting postgraduate studies

Environmental Sciences

The study program in the 2020/2021 academic year consisted of lectures, mandatory seminars, individual research work, and individual elective courses, which increased students' focus on their research and intensified their work on doctoral topics.

Domestic lecturers with full-time lecturer status at UNG, associate professors, or guest lecturers were included in the implementation of lectures within the postgraduate study of

Environmental Sciences in 2020/2021. All lectures, seminars and exams were held in English. Doctoral dissertation presentations were also held in English. Students were involved in research projects and programs carried out by research units at UNG or other research institutions with which we typically have collaboration agreements. Several students have also participated in international projects.

Implementation of the study program during the Covid-19 outbreak:

The outbreak of the Covid-19 epidemic hampered the program's smooth implementation, necessitating a new approach to communication between students and mentors. Instead of personal contacts, video systems were used to communicate, which necessitated numerous logistical changes and adjustments.

Physics

Physics is a third-level study program that is designed internationally and implemented in blocks of individual courses (intended for lectures and exams). Depending on the number of students, the courses are delivered as one- to four-week intensive courses in which the content of the courses is delivered in the lecture hall, individually with contact hours with the lecturer, or as individual distance learning. In addition to organised content, students' study obligations include mandatory seminars and individual research work. Students may also take exams in other doctoral study programs at UNG and related programs at other universities in Slovenia and abroad, with the approval of the mentor and the program's scientific council. In addition to pedagogical exchange, the method of study allows students to conduct research at a variety of domestic and international universities and research institutes. Students are split evenly between two majors: High Energy Physics and Materials Physics.

Implementation of the study program during the Covid-19 outbreak:

In the event of an emergency situation related to the Covid pandemic, we enabled students to attend lectures and seminars live remotely via a videoconferencing system (MiTeam, Zoom). We also enabled all students to communicate with their mentors and lecturers at a distance on a regular basis during speaking hours and consultations using a videoconferencing system. We provided them with access to e-learning materials and tasks to help them achieve the desired learning outcomes. We also enabled students to take the planned examinations in the form of oral exams, seminar presentations, and dissertation presentations using a video-conferencing system.

During the off-schedule period when they could access research laboratories and research equipment, we allowed all students to conduct individual research projects and practical exercises in laboratories. Despite their best efforts, some students, particularly those who had to do laboratory work in collaboration with other institutions, were delayed in their research.

Karstology

The internationally designed study program included condensed lectures, fieldwork, and, most importantly, an individual program. Personal consultations with students, professional literature, and the preparation of written assignments were all heavily

emphasized. The exams were held individually and in agreement with the lecturers. Condensed lectures, fieldwork, individual programs, consultations, and exams are mostly held in Slovene and English. Students in the Karstology program take selected exams at other faculties and universities in Slovenia and abroad, as agreed by the mentor and the program's Scientific Council. Students can connect with all leading karst researchers through the Institute for Karst Research ZRC SAZU, which is the world's central scientific research institution in the field of karstology.

The program included students from Slovenia, Croatia, Serbia, France, Lebanon, Brazil, Iran, and China. We successfully completed a doctoral dissertation presentation in October (student from Brazil). All students completed their obligations successfully and were able to progress to the following years.

The 2020/2021 study program was led by lecturers from the Institute for Karst Research ZRC SAZU and selected lecturers from abroad (from the University of Côte d'Azur, Nice, France, University of Padua, Italy, University of Zagreb, Croatia, University of Silesia, Katowice, Poland, Catholic University of Minas Gerais, Brazil and Geological Institute of the Czech Academy of Sciences, Prague, Czech Republic). Due to the global epidemiological situation, we organised the International Karst School, namely "Classical Karst", for the first time last year, which is the largest annual international professional and scientific remote meeting of karst researchers.

Implementation of the study program during the Covid-19 outbreak:

Despite the global epidemiological situation, we completed the academic year without incident. We communicated with the students in person, via various web links, phone, and e-mail. The epidemiological situation did not present any challenges to the implementation of student fieldwork. We also enabled all students to communicate with their mentors and course holders at a distance on a regular basis, and we provided them with access to learning materials and tasks to help them achieve the desired learning outcomes. Students were able to conduct knowledge tests, present seminars, and, for the first time, one dissertation presentation was entirely conducted via video-conferencing system.

Humanities

The study program was implemented in the form of regular lectures, seminar work and individual consultations. Local lecturers participated. Regular lectures were conducted according to the schedule.

Implementation of the study program during the Covid-19 epidemic: lectures, consultations with students, and presentations of doctorates were held online.

Cultural Heritage Studies

In 2020/21, two students from China enrolled in doctoral studies. One student enrolled in the one-year ETCAEH improvement program. One student completed a joint one-year ETCAEH improvement program. Four students successfully enrolled in their second year of doctoral studies. The individual study was a success, as the fluency of the use of the online platform enabled greater and easier interaction between mentors, professionals, and students. Students were also actively involved in all research activities, most of which were

conducted remotely (seminars, workshops, conferences). In 2020/21, we focused on completing research activities on the Horizon2020 CLIC project and preparing for the field implementation of the URBINAT project. In March 2021, in collaboration with the Universities of Kent and New Castle, we organised and led a one-month international workshop titled Our World Heritage. A sample evaluation of the study program was conducted in 2019/20, so in 2020/21 we considered and implemented all proposed improvements and corrections (separation of the joint one-year ETCAEH improvement program implemented by IUAV University by providing proof of program accreditation abroad).

** CLIC/ Circular models Leveraging Investments in Cultural heritage adaptive reuse in URBiNAT/ Healthy Corridors as drivers of social housing neighbourhoods for the co-creation of social, environmental and marketable NBS.*

Implementation of the study program during the Covid-19 outbreak:

In 2020/22, most lectures were delivered remotely via the UNG educational platform MiTeam. Students were also involved in all research activities, which were also conducted remotely. Students have access to all seminar and conference recordings, as well as all research reports and contents.

Molecular Genetics and Biotechnology

During the 2020/2021 academic year, study activities in the Molecular Genetics and Biotechnology program included condensed lectures, seminars for invited lecturers, and individual student study and research work. The study process went smoothly. We conducted all the planned activities of the first year and some courses from the second year. We did not have students in higher years, so we did not conduct any activities for those years.

Implementation of the study program during the Covid-19 outbreak:

In the event of an emergency situation related to the Covid-19 pandemic, we enabled students to attend lectures and seminars live remotely via a videoconferencing system (MiTeam, Zoom, Moodle). Lectures were held in this manner as part of the compulsory course Fundamentals of Molecular Biology and Biotechnology and as part of the organised content and presentation of student research work in the course Seminar I. We also provided regular distance communication with mentors and lecturers to all students.

Cognitive Language Sciences

In the academic year 2020/21, the Cognitive Language Sciences study program consisted of mandatory lectures, elective courses, and individual research work. In addition to domestic lecturers, four guest lecturers from Slovenia and abroad were invited to participate in the doctoral program's study process. In the first year of the doctoral program in 2020/21, one domestic student and one foreign student from Belgium enrolled. One student successfully completed their doctoral studies and presented their dissertation.

Implementation of the study program during the Covid-19 epidemic: Study activities in the doctoral program, as well as regular meetings between students and mentors, were mostly conducted remotely using video conferencing systems MiTeam and Zoom. The presentation of the doctoral dissertation was also conducted remotely.

Materials

In the academic year 2020/2021, the Materials study program is being implemented for the third time. The program is interdisciplinary in nature. Distance learning occurred as part of organised forms of study in the form of lectures, seminars, and tutorials, as well as in laboratories as part of experimental exercises. Students were also required to actively participate in courses by preparing reports, research assignments, and seminar assignments, as well as by participating in class discussions. The students' independent research work was conducted under the supervision of mentors in UNG research laboratories or partner research institutions (KI, JSI...), where the research work is performed by a mentor. Students could also take exams in other doctoral study programs at UNG and related programs at other universities in Slovenia and abroad, with the approval of the mentor and the program's scientific council.

Implementation of the study program during the Covid-19 outbreak:

Distance learning occurred as part of organised forms of study in the form of lectures, seminars, and tutorials, as well as in laboratories as part of experimental exercises.

Study results

In the academic year 2020/2021, 60 students were enrolled in eight postgraduate study programs. Students' average grades in all programs were higher than 8.5, and in most cases, higher than 9. Students generally pass exams in the first attempt, and the proportion of students who have met the requirements for promotion to a higher year is also very high. The average study period of students who have completed their doctoral studies is 4.91 years, implying that students complete their studies within one year after the end of their studies. The study results for each postgraduate program are presented below. A statistical analysis of student performance for each study program is also presented. Annex 1 contains a list of lectures and other study activities for individual doctoral programs.

Environmental Sciences

In the Environmental Sciences study program from October 2020 to September 2021, one student presented their doctoral dissertation, two students applied for approval of the topic of the doctoral dissertation, but one student dropped out of the study. One student successfully completed the presentation of the doctoral dissertation argumentation as part of the required seminar course Modern Trends in Environmental Sciences, and they were approved to continue their studies at the doctorate level. The application for the argument was previously approved by the Environmental Science study program's Scientific Council, and the topic of the doctoral dissertation was also confirmed. The student will submit their application to the UNG Senate in the 2nd year of study.

Physics

Six Physics program students successfully completed their studies by presenting their dissertations during the 2020/2021 academic year. Two students were enrolled in the first year. One student did not complete her study obligations for personal reasons and decided not to continue her studies at this time. All other enrolled students successfully completed their academic obligations and met the requirements for advancement to a higher year.

Karstology

Karstology was adopted as a postgraduate study program in 2003, and Karstology as a third-level study program was approved in 2008. 6 students were enrolled in the 2020/2021 academic year. The study program's implementation was partly organised and partly individual for each student. Despite the global health situation (COVID-19), we completed the academic year without incident. We communicated with the students via various web links, phone calls, and e-mail. Students' work was not hampered by the partially limited field work during the previous academic year, and they were able to progress to the following years. Other information about the study's findings is provided in the tables that follow the report.

Within the individual program, a strong emphasis was placed on introducing students to independent research work, which included involvement in international professional circles and various projects, active participation in international scientific meetings last year via web applications and encouraging and assisting in the publication of scientific papers. Excellent personal contacts with students, their responses to the study process, and continuous work on the program in close collaboration with teachers, mentors, and members of dissertation presentation commissions all contribute significantly to good study results. All other enrolled students completed their academic obligations and met the requirements for advancement to a higher year. One student successfully completed her studies with a dissertation during the 2020/2021 academic year.

Humanities

The Humanities study program was implemented in three modules during the 2020/2021 academic year: Literary Sciences, History and Migration, and Intercultural Relations. No students were enrolled in the first year. One student repeated the year and successfully completed it. One student received their doctorate degree, while the other received positive feedback from the commission members and is scheduled to present her work in December 2021. We still have a large number of senior students and graduates who are completing their studies/doctoral dissertation over a longer period of time due to work and family obligations. For the latter, we began holding online seminars four times a year in 2020/21, allowing them to have more contact with colleagues and assistance in writing a doctoral dissertation. We are in regular contact with all of these students on a regular basis, monitor their work, and advise them on scientific research.

Cultural Heritage Studies

One student successfully completed a one-year ETCAEH improvement program run in collaboration with the IUAV University of Venice in 2020/21. Three students successfully completed their first year of doctoral studies. Lectures, seminars, and conferences were

held remotely, and individual research work was conducted in an enhanced interactive way, made possible by the already established virtual interaction between mentors and students.

Molecular Genetics and Biotechnology

All other enrolled students completed their academic obligations and met the requirements for advancement to a higher year. After a lengthy pause, one student applied to continue her studies. The program's Scientific Council approved her completion of second-year student obligations and enrolment in the third year of the program. At the end of the previous academic year, two female students applied for approval of the topic of their doctoral dissertation, which will be considered during the current academic year.

Cognitive Language Sciences

One doctoral student in the Cognitive Science of Language program successfully completed his studies and presented his dissertation during the 2020/21 academic year. Two students enrolled in the first year. One student completed her second-year obligations and enrolled in her third year. The UNG Senate confirmed the topic of one graduate's dissertation as well as the commission for the dissertation's evaluation and presentation.

Materials

In the 2020/2021 academic year, 7 students were enrolled in the first year, 2 students in the second year, and 5 students in the third year. One first-year student dropped out of the program at the start, while the remaining students successfully completed their study obligations and met the requirements for promotion to a higher year. In the first year of the doctoral program Materials, one student from the EU MSCA ITN project enrolled in 2020/2021 and took exams against payment. In 2021/2022 he successfully advanced to a higher year.

3.2 SITUATIONAL ANALYSIS AND ORIENTATIONS 2019-2021

Environmental Sciences

Actuality of the contents of the existing program and integration of new knowledge: The foundation of the study is based on individual cooperation between the mentor and the student due to the relatively small number of doctoral students and the diversity of areas covered by the program. The mentor selects the most appropriate contents directly related to the student's doctoral dissertation in collaboration with the student, ensuring the topicality of the contents. An additional control mechanism for topicality is the student's obligation to prepare at least one article for publication in an international journal with an impact factor (IF). Modern Trends in Environmental Sciences, a compulsory first-year course in which renowned domestic and foreign experts present the latest results from their research field, also provides students with new knowledge and topicality of the content.

Coherence of the proposed changes with the vision and development strategy of the Faculty and the University: The proposed program changes are always consistent with the basic strategy of the Graduate School and the University of Nova Gorica, which promotes

close integration of programs with the University of Nova Gorica's research laboratories, centres, or institutes, as well as other relevant research institutions at home and abroad.

Relationship between the contents of the study program: Students in their first year gain a broader understanding of the contents of scientific research work through the compulsory course Modern Trends in Environmental Science, which covers half of their study obligations. During their senior years, the majority of their activities are focused on the field of research within their doctoral dissertation, which is supplemented with the contents of compulsory elective courses. They can also agree on contents that are lectured at other faculties within UNG, at other Slovenian universities, or abroad within the framework of these contents. Vertical coherence of content is ensured by writing annual reports on the progress of research work in the compulsory course Research Work on a regular basis.

Consistency and content connection (compliance) of curricula goals, competencies, or learning outcomes with study program goals, competencies, and content: The study program's main goal is to educate and train professionals who will have all of the necessary knowledge for an in-depth understanding of scientific work in the field of environmental science, to develop independent thinking and critical evaluation of their work, and to develop personal responsibility and decision-making skills in academia and in work processes. The emphasis is on in-depth research work, which encourages rotation between different research groups and, as a result, the acquisition of additional knowledge and experience, as well as attendance at seminars where domestic and international experts lecture.

Adequacy of course distribution by semesters and years (horizontal and vertical connection) and credit evaluation: To ensure the quickest and most successful completion of studies, the number of theoretical courses is limited to a small number in the first and second years, with the emphasis shifting to research work related to their doctoral dissertation in higher years. In the first year, seminars within the course Modern Trends in Environmental Science ensure horizontal coherence by exposing students to knowledge that is not directly related to their research work. In the second year, they can narrow their knowledge to three elective courses. Together with their mentor, they select a topic within a broader topic related to their research or provide them with a broader insight into research issues in their field. During their senior years, they focus solely on research, writing articles, or preparing a doctoral dissertation.

The vertical connection is represented by ongoing work on the contents of the doctoral dissertation, which is submitted annually in the form of a research work report as proof of the order of research.

In the first and second years, theoretical education accounts for half of the credit points, while research work accounts for the other half. In the third year, all credit points are assigned to research work, whereas in the fourth year, half of the credit points are assigned to the preparation of a doctoral dissertation. This, in our opinion, ensures optimal use of time and the ability to complete studies within the time frame specified.

Adequacy of the implementation of the study program, methods and forms of pedagogical work and student work: The program envisions students acquiring fundamental knowledge in general and elective courses, conducting intensive research, participating in seminars, and participating in critical and polemical discussions. There are few organised or formal forms of study, and even these are tailored to individual students' needs through a diverse range of electives. A strong emphasis is placed on research, data processing and analysis, and the development of communication skills. Students' responses indicate that this method of working suits them because they can devote themselves in depth to their research work and narrower professional field. We are aware that a high volume of independent work necessitates continuous monitoring of students. The annual evaluation of research work is dedicated to this, which the student performs in collaboration with the mentor and presents in the form of a written report, which is finally confirmed by the holder of the course Research Work I-IV.

Adequacy of study materials, introduction of electronic study materials for e-study and distance learning: Due to the prevalence of individual study and the diversity of research areas, no standard study material is prescribed. The set of literature for compulsory elective courses is updated annually at the lecturer's suggestion and is adapted to the individual student or field of study. Students at UNG can participate in online seminars for e-learning purposes (Science Evenings)

<https://www.youtube.com/playlist?list=PLA2CC4F52ADAAA7F5&feature=plcp>

Distance learning is also possible through student communication with course holders via e-mail and Skype, particularly in directing and monitoring individual work.

Evaluation of student workload, progress and completion of studies: Student workload evaluation is conducted annually through the Student Workload Survey (see Annex 3). There are no major burdens because the majority of the students are MR or scholarship holders, allowing them to devote their full attention to their studies or research work. Because of the small number of students, transition statistics can be misleading. Annual reports or entries are used to track progress. The average length of study is 4.6 years, which is related to the nature of research work, particularly that conducted in the natural environment.

Obtaining the desired competencies or learning outcomes: Individual course holders are primarily responsible for monitoring the attainment of competencies and learning outcomes. The program's average grades range between 8.0 and 9.5, with no exam repetitions, indicating successful achievement of learning outcomes. The majority of doctoral students continue their research in research institutions, environmental agencies, or environmental-related businesses. This is a good indicator of successfully acquired competencies for environmental sciences research and development work. Many of them have already published high-profile works (articles) during their studies.

Adequacy of knowledge testing and assessment: All elective courses are assessed numerically, whereas Research Work I-IV and Modern Trends in Environmental Science are assessed using a pass/fail system. Numerical assessment has proven to be very

appropriate in theoretical electives, as students are more motivated to complete course obligations and participate actively.

Additional knowledge is assessed through independent work, which the student presents through project reports, public presentations of results, and critical and polemical discussions. Proof of their knowledge is also the preparation or publication of a scientific article, which they must complete before presenting their doctorate. The student completes their studies by presenting their doctoral dissertation to a three-member commission.

Enrolment analysis: Enrolment in the program has been relatively low, but stable, over the last five years. Thus, each year, an average of 4.2 students (between 3 and 7) were enrolled in the first year, 14.6 students (between 11 and 17) in the entire program, and 3.8 students (between 3 and 5) received their doctorates.

Some of these students are enrolled in the ARRS MR program, while others are recipients of various scholarships. In any case, the low enrolment of students is influenced by the ARRS's reduction of financial resources, but there is still interest from international students to study at UNG. Only a stable source of student funding will allow us to see an increase in enrolment in the future. A general reduction in tuition fees per year, or at least a reduction in tuition fees in the final year of study, would also help the program's competitiveness.

Verification and analysis of graduates' employability: Verification and analysis of the employability of graduates is determined by the UNG Career Centre. According to surveys, students have a very poor understanding of the function and operation of the Career Centre, which should definitely be improved with more information. According to Career Centre analyses, the employability of UNG graduates after 6 months is higher than 80%, and higher than 90% in the doctoral program. Most graduates from the business environment continue to work for a company. Students from research organisations usually go to postdoctoral training at another organisation, and some of them look for jobs in companies that match their professional qualifications.

Identifying new knowledge needs and employment opportunities in the environment, labour market needs, or societal knowledge needs: We do not directly identify new knowledge needs with end-users. However, with candidates who have sources of funding other than the ARRS, we discuss in detail their wishes, expectations, or requirements at the time of enrolment or, at the very least, in the first semester, so that we can find a suitable mentor and adjust the curriculum. We also support interdisciplinarity by allowing students to enrol in a number of ECTS credits in non-UNG elective courses, increasing their knowledge and thus their employment opportunities.

The student may select elective courses from other study programs within the GS in the total amount of up to 30 ECTS credits. The student can choose courses from other accredited doctoral programs at other universities in Slovenia or abroad within this elective (up to 30 ECTS), but not more than 24 ECTS, which is 40% of the 60 ECTS provided for organised forms of study. A student can earn some of these 24 ECTS by attending summer schools or other programs that do not have units evaluated according to the ECTS system, but only up to 10 ECTS, which is the legal limit for free electives in organised forms of study.

Physics

Actuality of the contents of the existing program and integration of new knowledge: All offered courses are structured in such a way that students learn basic knowledge and new findings in each field.

Coherence of the proposed changes with the vision and development strategy of the faculty and the University: The proposed program changes are always consistent with the overall strategy of the Graduate School and the University of Nova Gorica.

Relationship between the contents of the study program: The program provides several courses to support and implement various study plans in the areas of particle physics/astrophysics, atmospheric physics, materials physics, and numerical modelling of phase transitions in materials. All students are exposed to this broad knowledge through the courses 'Seminar' and 'Communication in Science.'

Consistency and content connection (compliance) of curricula goals, competencies, or learning outcomes with study program goals, competencies, and content: The third-level doctoral study program in Physics is carried out in accordance with its objectives. It includes research activities from all fields of physics, with a focus on high energy physics (particle astrophysics and cosmology), materials physics (research of electronic, structural, and chemical properties of materials, as well as characterization methods at the atomic and molecular levels), and fluid physics (phase transitions in materials and aerodynamic surfaces). The program is strongly research-oriented and is intended for students who want to pursue independent and self-initiated research work, where they will be faced with the most challenging tasks, both academically and economically.

Adequacy of course distribution by semesters and years (horizontal and vertical connection) and credit evaluation: The program is linked vertically and horizontally. In the first and second years, compulsory and elective courses, as well as research work take place, whereas only research work takes place in the third and fourth years. Credit valuation of courses is appropriate.

Adequacy of the implementation of the study program, methods and forms of pedagogical work and student work: The adequacy is excellent because the professors are also experienced researchers in the field of teaching, and there is a lot of direct and active contact with students during the study program's implementation.

Adequacy of study materials, introduction of electronic study materials for e-study and distance learning: In general, all lectures are delivered in a hybrid mode that prioritizes distance learning. This has proven to be extremely useful during the coronavirus pandemic, allowing us to quickly transition to online lectures.

Evaluation of student workload, progress and completion of studies: We believe that by extending the study program to four years, there is a perfect balance between students' obligations and the time available to complete their studies.

Obtaining the desired competencies or learning outcomes: Individual course holders are primarily responsible for monitoring the attainment of competencies and learning outcomes. The program's average grade is higher than 9, indicating that learning outcomes have been met successfully. Furthermore, the majority of graduates continue their research work in research institutions or universities.

Adequacy of knowledge testing and assessment: The purpose of knowledge testing and assessment is to promote student learning and measure student achievement to learning outcomes in order to achieve valid, reliable, fair, transparent, and unbiased values.

Enrolment analysis: It is consistent and coherent with ongoing laboratory research projects.

Verification and analysis of graduates' employability: Graduates have a high employability rate, with the majority of graduates working as researchers or assistants in research institutes, universities, or businesses within a year of graduation.

Identifying new knowledge needs and employment opportunities in the environment, labour market needs, or societal knowledge needs: The content of courses and research topics is always in line with the needs of the environment's universities and research institutes.

Karstology

Actuality of the contents of the existing program and integration of new knowledge: The program is built around an in-depth presentation of Slovenian and international karstology. We focus on three-dimensional landscape knowledge (karst surface, karst underground, karst waters) and karst heritage. Students are introduced to the laws of karstification, speleological, geological, geographical, hydrological, physical, biological, microbiological, and ecological characteristics of the karst surface and underground, karst around the world, and research methodology, karst measurements, and the history of karst research. The program is primarily carried out by researchers from the ZRC SAZU Institute for Karst Research in collaboration with selected researchers from abroad (from the University of Côte d'Azur, Nice, France, University of Padua, Italy, University of Zagreb, Croatia, University of Silesia, Katowice, Poland, Catholic University of Minas Gerais, Brazil and the Geological Institute of the Czech Academy of Sciences, Prague, Czech Republic) who are top karst experts in the country and around the world.

Our native Karst gave its name to landscapes on carbonate rocks, and karstology began to develop as a result of its descriptions. Slovenia is also known as the birthplace of speleobiology. We collaborate with karstologists from around the world. Our exceptional natural heritage, combined with the excellent development of the international tradition of Slovenian karst research, has resulted in the establishment, not only in Slovenia, but also around the world, of a unique study of karstology.

The lecturers are constantly improving their program by incorporating the most recent scientific findings. In June 2014, UNESCO recognized our doctoral study program Karstology as outstanding and named it the UNESCO Chair on Karst Education.

Coherence of the proposed changes with the vision and development strategy of the faculty and the University: We do not intend to make any significant changes to the program in the near future that would necessitate Senate approval. Due to the retirement of two lecturers last year, the UNG Senate approved the replacement of some course holders. Both fundamental courses, Introduction to Karstology and Research Methodology, are being modernized and revitalized. All proposed program changes are always consistent with the basic strategy of the Graduate School and the University of Nova Gorica

Relationship between the contents of the study program: The doctoral program in karstology is the only one in the world, and the only one in which a student receives the title of Doctor of Science in the field of karstology. Our program is the only one that provides a comprehensive study of karstology, that is, the study of karst surface, karst underground, and karst waters all in one location. Individual karstology topics that are part of other studies are only available to students at some other universities around the world. There are two basic compulsory courses in the first year, Introduction to Karstology and Methodology of Research Work, which connect and form the basis for elective courses. Our study is especially enriched by 42 elective courses that are inextricably linked and can be accepted and studied in depth separately by the student. We are constantly updating our program lecturers, who are researchers by nature, with new scientific findings, discoveries, and results, while also maintaining scientific integrity. The study is also linked during the four-year period by the courses Independent Research Work (I to IV) and Seminar (I and II), in which students acquire knowledge and competencies for independent research work.

Consistency and content connection (compliance) of curricula goals, competencies, or learning outcomes with study program goals, competencies, and content: We ensure that the curricula's goals, competencies, and learning outcomes are consistent and substantively related to the study program's goals and competencies.

Adequacy of course distribution by semesters and years (horizontal and vertical connection) and credit evaluation: Lecturers have not identified any inconsistencies in the distribution of courses by semesters and years, nor have we received any recommendations from students on possible changes; on the contrary, students are extremely satisfied with the design of the study program and the work of the lecturers. The same is true for individual course credit valuation. As a result, the set scheme remains unchanged. In addition to Independent Research Work I and Seminar I, a student must complete two basic compulsory courses in the first year in order to enrol in the second year. They also complete Independent Research Work every year until the end of their studies, as well as Seminar II and 6 elective courses that are reasonably selected and related to the research work in the second year.

Adequacy of study program implementation, methods and forms of pedagogical work, and student work: The designed study program included condensed lectures, fieldwork, and, most importantly, an individual program with students. The primary emphasis is on personal consultations, which take place continuously and throughout the study, utilizing all modern communication possibilities. The work is also constantly monitored by the program director.

Some students are involved in research at the ZRC SAZU Institute for Karst Research, while others are involved in karst projects at universities or other organisations (water

supply, planning, teaching). Karstology students have the opportunity to participate and engage in various laboratories in Europe, North, Central, South America, Asia, Africa, and Australia because the Institute has been closely involved in international karstology for more than seven decades and is one of its focal points. Students can connect with all of the world's leading karstologists, karst institutes, and laboratories through the Institute, the Karst Academy, and the International Speleological Association, which are both based at the Institute for Karst Research in Postojna.

Adequacy of study materials, introduction of electronic study materials for e-study and distance learning: The program is conducted by the world's leading karst researchers, who are involved in new research findings at home and around the world on a daily basis, both in the field and by monitoring new literature. We provide this to students in various forms. For the time being, e-study and distance learning are not necessary due to the small number of students and the established and proven successful individual work with students both in Slovenia and abroad. We are, of course, prepared if enrolment increases significantly or there are compelling reasons for the change.

Evaluation of student workload, progress and completion of studies: Personal contact between mentors and the program director is used to evaluate and determine the suitability of student workload. The annual workload has proven to be adequate over the course of the study and will not be changed. Students typically progress from year to year on a consistent basis. Some, on the other hand, postpone the presentation of their dissertation. Within the individual program, a strong emphasis is placed on introducing students to independent research work, which includes involvement in international professional circles and various projects, active participation in international scientific meetings, and encouraging and assisting in the publication of scientific papers. Excellent personal contacts with students, their positive response to the study process, and continuous work on the program in close collaboration with teachers, mentors, and members of the dissertation presentation commissions all contribute significantly to good study results and, of course, successful completion of studies.

Obtaining the desired competencies or learning outcomes: Students achieve the set competencies, and the learning outcomes are satisfactory. Annual grades are typically between 9.5 and 10. Students can participate in research in a variety of domestic and international research projects, as well as other karst-related activities. We believe that this is also one of the most important conditions for our students' success. Springer has already chosen five of our doctorates, the last of which will be published at the end of 2020, for inclusion in the collection of "outstanding doctorates," known as Springer Theses, Recognizing Outstanding Ph.D. Research.

Adequacy of knowledge testing and assessment: Teachers on the program who are Slovenes and established higher education teachers from other countries collaborate closely. Almost all of us have earned the title of full-time professor in addition to scientific titles (scientific advisor). This applies to Slovenian and foreign lecturers. A large number of lecturers teach at multiple universities. As a result, knowledge testing has the indirect possibility of balancing and adjusting to the appropriate level. Core compulsory and elective courses are graded numerically, while Independent Research Papers, Seminars, and the Dissertation are graded descriptively.

Enrolment analysis: We would like to see a slightly higher student enrolment. The elimination of scholarships or financial support for study and research has resulted in lower enrolment in recent years, despite numerous responses from those interested (including those from non-Karst countries) to our numerous invitations to enrol in various forms and media.

Since the appointment of our doctoral program as the UNESCO Chair on Karst Education, there has been a significant increase in interest in the program (UNESCO Karstology Study Centre). Tuition fee inability no longer affects only students from developing countries or the third world, but also students from the Western world, Western and Northern Europe, and Slovenia.

In 2020, the study program Karstology and the Ministry of Foreign Affairs of the Republic of Slovenia prepared and announced two Ad futura scholarships for citizens of recipient countries or beneficiaries of official development assistance (OECD DAC) within the Public Scholarship, Development, Disability, and Maintenance Fund of the Republic of Slovenia, covering all costs for the study of karstology and obtaining the title of Doctor of Science:

<https://www.srips-rs.si/vsi-razpisi/razpis/stipendije-za-izobrazevanje-tujih-drzavljanov-na-podlagi-razvojnih-dogovorov-v-letu-2020-306-jr>. The scholarship application period will last five years. Due to the global health situation (COVID-19), those interested have postponed enrolment until next year.

Despite the health situation, procedures for the transfer of knowledge to Asian students at our joint Slovenian-Chinese International Karst Environmental Laboratory (Yunnan International Karst Environmental Laboratory) at Yunnan University (Kunming, China) continued successfully last year.

We meet with the leadership of Kunming University of Yunnan on a regular basis, and we are still working to reach an agreement on the implementation of a double degree for doctoral studies. We learned from China that the University of Nova Gorica has been added to the Chinese Ministry of Education's list, which will allow us to take even more steps toward our goal. We intend to establish a Karstology study program in Kunming, China, as part of our joint Slovenian-Chinese International Karst Environmental Laboratory (Yunnan International Karst Environmental Laboratory). Last year, on the initiative of the director of ZRC SAZU, the Slovenian Ambassador to the People's Republic of China in Beijing paid us a visit at the Institute in Postojna. We presented her with our many years of successful research and organisational work in China. She assisted us in preparing double degrees.

Verification and analysis of graduates' employability: So far, 26 students have received their doctorates from the program. They were all employed as higher education teachers, heads of research and service institutions, secondary school teachers, postdoctoral students at leading universities around the world, researchers in service companies, researchers in scientific research institutions, researchers in academies of science, and researchers and managers in nature conservation regional parks.

Identifying new knowledge needs and employment opportunities in the environment, labour market needs, or societal knowledge needs: The program prepares students for

independent research and applied work (interventions in karst) in the field of karstology. We also identify and monitor new knowledge needs as well as employment opportunities around the world through the International Karst School "Classical Karst," which is the largest annual international professional and scientific meeting of karst researchers from around the world (up to about 250 researchers from 40 countries) and takes place at the Institute of Karst Research ZRC SAZU (for the first time, we were forced to hold the 28th International Karst School "Classical Karst" remotely last year).

The lecturers in the Karstology program realized that we needed to transfer our knowledge to Asian students after nearly 30 years of continuous research work in China and knowledge of the situation there. We are preparing an agreement to implement a double degree as part of our joint Slovenian-Chinese International Karst Environmental Laboratory (Yunnan International Karst Environmental Laboratory), based in Yunnan, Kunming, founded in 2012 and operating within Yunnan University (Kunming, China), which will serve as the foundation for a joint study of karstology at this Asian university. Yunnan University has been admitted to a group of Chinese universities that are expected to rank among the top twenty in China in the coming years.

Humanities

Actuality of the contents of the existing program and integration of new knowledge: The professors who teach in the doctoral program are mostly researchers who are involved in research projects, so they can always provide students with up-to-date content and new knowledge.

Coherence of the proposed changes with the vision and development strategy of the faculty and the University:

The proposed program changes are always consistent with the basic strategy of the Graduate School and the University of Nova Gorica, which promotes close integration of programs with the University of Nova Gorica's research laboratories, centres, or institutes, as well as other research institutions at home and abroad. The program is open to students and professors from all over the world, and it encourages collaboration and the exchange of ideas.

Relationship between the contents of the study program: The program takes an interdisciplinary approach and is based on three areas: literary studies, history and migration, and intercultural relations. The compulsory course *Methods of Research, Argumentation, and Writing in the Humanities and Social Sciences* serves as the study program's central connection, and it is supplemented with elective courses from the above three fields. The latter assists the student in gaining knowledge in the field of doctoral dissertation. The courses *Independent Research Work I-II* and *Research Seminar I-II* are inextricably linked in terms of content. Within the latter, students gain the necessary knowledge and skills for the written and oral presentation of scientific findings obtained from research work. The research findings are presented by first- and second-year students in a seminar at the end of the second semester in front of a mentor, students, and professors from the program.

Consistency and content connection (compliance) of curricula goals, competencies, or learning outcomes with study program goals, competencies, and content: We believe that the curricula's goals, competencies, and learning outcomes are consistent with the study program's goals, content, and competencies. The student is qualified to conduct scientific research in the chosen field.

Adequacy of course distribution by semesters and years (horizontal and vertical connection) and credit evaluation: The courses in the first and second years, where we have organised forms of study, are organised in such a way that there are compulsory contents in the first semester and optional contents in the second. The emphasis in the first and second years is on the acquisition of methodological and theoretical knowledge, as well as the development of competencies in scientific discourse. The emphasis in the final two years is placed on independent research work in collaboration with a mentor, culminating in the presentation of a doctoral dissertation.

Adequacy of the implementation of the study program, methods and forms of pedagogical work and student work: The program envisions students acquiring fundamental knowledge in general courses, conducting intensive research, participating in seminars, and scientifically argued participation in discussions. A strong emphasis is placed on research and the development of communication skills. Students' responses indicate that this method of working suits them because they can devote themselves in depth to their research work and narrower professional field. Thus, an individual approach prevails in elective courses. The research seminar, on the other hand, aims to develop professional argumentation skills as well as public presentations of research findings and scientific discussions.

Adequacy of study materials, introduction of electronic study materials for e-study and distance learning: The study material in the program is prescribed within the curricula. Distance learning is possible through student communication with course holders via e-mail, particularly in directing and monitoring individual work. The MiTeam platform has been available for all courses on the program since 2019.

Evaluation of student workload, progress and completion of studies: Student workload evaluation is conducted annually through the Student Workload Survey. Students generally advance to their senior years on a regular basis. Problems arise as a result of family circumstances (child illness, death in the family), workload, and difficulties obtaining a visa in the case of international students.

Obtaining the desired competencies or learning outcomes: Individual course holders are primarily responsible for monitoring the attainment of competencies and learning outcomes. Students demonstrate that they have met the planned learning outcomes and competencies by passing their exam. Students must have a grade point average of at least 8 in all courses in order to complete their doctoral studies. They also demonstrate the acquired learning outcomes and competencies by publishing a scientific article in an internationally recognized journal in the field of a doctoral dissertation, which is also a requirement for taking the exam.

Adequacy of knowledge testing and assessment: Knowledge is assessed through oral and written exams, seminar papers, the presentation of research work in the seminar, and the final presentation of the doctoral dissertation. We indirectly build the student's competencies for professional discussion in various oral and written situations, which they will face as a future researcher, using such a combined method of examination.

Enrolment analysis: Although there has been no enrolment in the last two years, there is interest in this study program, indicating that information about the program is satisfactory. Data from the last two years include: former FH students (2), some primary and secondary school teachers (4), and students from Friuli Venezia Giulia - from the University of Udine (2), candidates from the former Yugoslavia (1), and candidates from outside the EU (2). The amount of tuition fees is shown as an obstacle to enrolment in the relevant study program among the more serious candidates who request a personal meeting with the program director. To assist students financially, we sought additional tuition fee funding through SLORI, which currently has limited funding opportunities. Furthermore, it would fund topics that are relevant to it; however, students typically have already developed concepts for research topics and find it more difficult to adapt to the needs of the financier. This possibility remains open, and we discuss it at the SLORI Scientific Council meetings on an annual basis. Given that tuition fees are an obstacle to enrolment in doctoral studies, we would propose a tuition fee reduction in the upcoming academic year, which could also be used to advantage for promotional purposes. In the past, the program had a higher enrolment when tuition fees were reduced or when we had funds to cover tuition fees from other sources (2 female students). We have been actively involved with the ICM (Istituto per gli incontri Culturali Mitteleuropei) for the past two years, so this year we will discuss funding opportunities, paving the way for a cross-border, multicultural space, particularly with Italian work. For the Friulian part, we will discuss funding opportunities with the Friulian Research Institute in Udine (Società filologica friulana). The program is promoted, among other things, by a network of secondary and primary school teachers in Friuli Venezia Giulia. According to the results of recent years, the students who are most motivated to join our program are those who want to conduct research directly related to the cross-border area and work in this field. These students are also notable for the high quality of their academic performance. We had a student from the University of Vienna on a one-year exchange who studied multilingual literature on the Isonzo Front. We also had a Bulgarian exchange student who studied Slovene dialects in Friuli Venezia Giulia for a year (Udine region). Promotion for students from the former Yugoslavia and neighbouring countries is part of the GS promotion; in recent years (prior to COVID), we conducted targeted promotion of the program at all three Czech universities where Slovenian language is a study option (Prague, Brno, Pardubice). The latter were also on a study visit to UNG (spring 2019). We will highlight the possibilities of doctoral topics for promotional purposes in the future, taking advantage of the relevant potential of cultural heritage and the possibility of comparative treatments with related topics in Europe and around the world.

Verification and analysis of graduates' employability: Verification and analysis of the employability of graduates is determined by the UNG Career Centre. According to surveys,

students have a very poor understanding of the function and operation of the Career Centre, which should definitely be improved with more information. According to Career Centre analyses, the employability of UNG graduates is greater than 80% after 6 months, and it is even slightly higher in the doctoral program.

Identifying new knowledge needs and employment opportunities in the environment, labour market needs, or societal knowledge needs: The staff we educate are needed in research and university institutions both at home and abroad. At the same time, it should not be overlooked that our program is housed in a distinctly multicultural environment characterized by cross-border interactions. There is still a lot of potential in the field for research into literary and cultural heritage, as well as the issue of migrants and, as a result, employment opportunities. At the same time, we observe a lack of cross-border collaboration between the UNG humanities and Italian research institutions. In order to accomplish this, we strengthened ties with the Slovenian Research Institute in Trieste and the Friulian Philological Society in Italy in 2018. In 2019, we made contact with the ICM of Gorizia (Istituto per gli Incontri Culturali Mitteleuropei). We also maintain regular contact with the Trieste National and Study Library, which employs Doctors of Science in the field of humanities and social sciences. We strengthened our relationship with the DIZ Gregorčič lyceum in 2019/20.

Cultural Heritage Studies

Actuality of the contents of the existing program and integration of new knowledge: The doctoral program is intended to be an interdisciplinary combination of basic scientific fields and expertise in the fields of architectural, urban, and landscape heritage protection, planning, and management. The program, according to course holders and mentors, is highly international in design, ensuring a constant flow of knowledge and confrontation with various research, professional, and pedagogical contexts. The program's design is also the result of a successful collaboration between the University of Nova Gorica and the Iuav University of Venice, which ensures the program's quality implementation. Individual studies are also partly conducted in Venice, thanks to collaboration with the Iuav University, which provides students with a globally recognized international scientific and educational environment in all disciplinary fields working in the study of cultural heritage. The course of Modern Trends in the Protection, Planning, and Management of Cultural Heritage, presented by invited international experts, represents an exceptional opportunity for ongoing knowledge updating in the field of current scientific trends, achievements, and content. We are also updating the program's content by expanding the number of elective courses available. We held a standard workshop titled Our World Heritage in 2020, in collaboration with the Universities of Kent and Newcastle, where we exchanged different approaches to study and research, as well as the most recent topics in the field of heritage studies. We clearly separated the doctoral study from the one-year joint study ETCAEH/*Economics and Techniques for the Conservation of the Architectural and Environmental Heritage, based on the recommendations of the SQAA sample evaluation.* Aside from the aforementioned and the implementation of distance learning, we made no new changes in 2020/21.

Coherence of the proposed changes with the vision and development strategy of the faculty and the University: Changes in the implementation of distance learning in 20/21 are in line with the Graduate School and the University of Nova Gorica's strategy. As most of the research was done remotely, we were able to maintain and coordinate the connection with the research laboratories and centres, as well as the programs, as needed.

Relationship between the contents of the study program: The program is based on a consistent share of compulsory courses that are common to all areas of study and provides a solid foundation for all students, regardless of prior knowledge or academic background. Continuous implementation of required public presentations on the progress of individual research and project work, in which lecturers, the program's scientific council, and students from various fields participate, ensures constant confrontation and horizontal integration of specific contents with the integrated orientation of the study program. Vertically, the contents are upgraded with the courses Modern Trends in Cultural Heritage Protection, Planning, and Management and the courses Research Work I-IV, which provide a link between all years.

Consistency and content connection (compliance) of curricula goals, competencies, or learning outcomes with study program goals, competencies, and content: Through intensive independent research and project work, the study's main goal is to provide basic knowledge and train students to critically interpret existing and research new theoretical and methodological starting points. The set of compulsory courses in the first year, which are required for all majors, provide a foundation for a comprehensive understanding of the values, issues, and challenges of heritage. The sets of elective courses offered within the selected study fields, on the other hand, provide the acquisition of specific knowledge that allows understanding of modern research and professional achievements, as well as a critical evaluation of the fundamental insights. In the higher years of study, basic and specific knowledge is gradually updated and concretely consolidated through applied work in individual research and project work. The entire educational and training process thus leads to the program's main goal: acquiring the knowledge and skills required to deal with modern research and professional practice in creating innovative solutions in the field of heritage and its integration into an integrated modern and sustainable environment.

Adequacy of course distribution by semesters and years (horizontal and vertical connection) and credit evaluation: The program is linked vertically and horizontally. There are several general theoretical contents in the first year that represent the basic or specific basis for knowledge of the field of later research work. The fundamental knowledge gained in the first year ensures an interdisciplinary link between all specific fields. This provides a set of four compulsory courses. A set of three general and specific elective courses provides the fundamental specific basis.

Students select elective courses based on their individual research interests and specific professional interests. Elective courses are introduced in the second half of the first year and culminate in the course Integrated project work, which connects all previously acquired knowledge. Such an arrangement enables a gradual and solid entry into independent individual research work, which is the primary activity of students in their senior years. The knowledge gained in the first year is supplemented in the second year with in-depth specific content provided by the course of Modern Trends in Heritage Protection, Planning,

and Management. As the student progresses to higher years, the emphasis shifts to individual research work, which is consistently reinforced by training for critical evaluation of results, effective presentation of research achievements, including confrontation with peer review of research results (Research work II-IV), leading to the design and preparation of their dissertation. The course concludes with the presentation of a doctoral dissertation. Vertical connectivity is most visible in the courses Integrated Project Work and Research Work I-IV. In these courses, the acquisition of relevant competencies and knowledge can be traced throughout the course of study. The annual evaluation always includes a comparison of progress to the previous year. Credit valuation of courses is appropriate.

Adequacy of the implementation of the study program, methods and forms of pedagogical work and student work: The program envisions students acquiring fundamental knowledge in general and elective courses, conducting intensive research, participating in seminars, and participating in critical and polemical discussions. The variety of organised forms of study is extensive and tailored to the differences in academic background and related needs of individual students. Through organised participation in international meetings and regular public presentations of research work, a strong emphasis is placed on research work, data processing and analysis, and the development of communication skills. The program's participation in international research projects H2020 provides all students with an appropriate and concrete research environment. The annual central evaluation of research work and acquired competencies is dedicated to the continuous monitoring of students' work through the submission of research activity reports and public presentations to the permanent scientific council and invited experts who follow research progress and guide students' work.

Adequacy of study materials, introduction of electronic study materials for e-study and distance learning: The study material in the program is prescribed within the curricula. In addition to the fundamental literature, the course literature is updated on an annual basis. For e-learning purposes, students can follow some activities online. Selected seminars at UNG are one such example (Scientific Evenings). The program makes audio and video recordings of all lectures available to students.

UNG Science Evenings:

<https://www.youtube.com/playlist?list=PLA2CC4F52ADAAA7F5&feature=plcp>

Distance learning is possible through student communication with course holders via e-mail, particularly in directing and monitoring individual work.

Evaluation of student workload, progress and completion of studies: Student workload evaluation is conducted annually through the Student Workload Survey. As surveys still do not reach all students, students are invited to participate through secretariats and in the annual introductory presentation meeting with students, course leaders, and the program director. The workloads of the students shown are mostly within the expected range. Nonetheless, we observe that students do not progress smoothly from year to year. The most significant obstacle to regular advancement is part-time study or employment of students, which is primarily conditioned by a lack of co-financing and scholarships that would enable continuous commitment to study. It is common for such student status to

result in a temporary or permanent interruption of studies or a significant extension of studies.

Obtaining the desired competencies or learning outcomes: Individual course holders are primarily responsible for monitoring the attainment of competencies and learning outcomes. The vast majority of graduates are foreigners who have had great success pursuing a university or research career in international institutions or companies, which is a good indicator of successfully acquired competencies in the field of research and professional work. The majority of domestic students are already employed when they enrol. Acquired competencies and continued engagement with the research environment enable domestic students to advance in their careers by introducing new activities in institutions and sectors where they are already employed.

Adequacy of knowledge testing and assessment: Because of the content and organisation of the courses, assessment in all courses is done using a pass/fail system. Students submit a written report for each course that is based on orientation questions and may include specific annual updates to the content. Students create a research report/assignment based on orientation questions that includes an individually chosen topic and reflects the application of theoretical knowledge in specific contexts. As a result, we direct students to the individual design of research work from the start of the study, which has proven to be very appropriate, as students are confronted with the reality of research practice and the range of obstacles and benefits of individual work. Holders of courses in knowledge assessment primarily evaluate the systematicity and attention in the analysis, as well as the coherence and integrity in the design of reports/tasks. The immediate confrontation with their own abilities motivates students to create a comprehensive presentation of the acquired knowledge, which also includes an individual interpretive component.

In general, the program's examination is heavily weighted toward independent work, which the student presents in the form of project reports, public presentations of results, and critical and polemical discussions. The student completes their studies by presenting their doctoral dissertation to a three-member commission.

Enrolment analysis: Despite the fact that there is a lot of interest in enrolling every year, enrolment has been steadily and significantly declining in recent years. We see the reason solely in the lack of co-financing and scholarships for doctoral studies, which has resulted in a significant increase in tuition fees, which, combined with the four-year study period, makes it financially impossible for potential applicants to study.

Verification and analysis of graduates' employability: Verification and analysis of the employability of graduates is determined by the UNG Career Centre. According to surveys, students have a very poor understanding of the function and operation of the Career Centre, which should definitely be improved with more information. According to Career Centre analyses, the employability of UNG graduates is greater than 80% after 6 months, and it is even slightly higher in the doctoral program. Most graduates from the business environment continue to work for a company. Students from research organisations usually go to postdoctoral training at another organisation, and some of them look for jobs in companies that match their professional qualifications.

Identifying new knowledge needs and employment opportunities in the environment, labour market needs, or societal knowledge needs: The Doctoral Program in Cultural

Heritage Studies is an interdisciplinary program that includes architecture and construction, as well as social sciences, natural sciences, law, and the humanities. The majority of research is conducted in the contexts of architectural heritage, built environment, urban and cultural landscape, as well as analysis of the relationship between culture and economic outcomes, cultural institutions, social norms and values. Market analysis and knowledge are thus an integral part of the program, which each year includes, in addition to the basic contents, a number of invited lectures by foreign experts who update their knowledge by analysing international market trends. The program's participation in many European projects (from Interreg to H2020), in which companies and public institutions have played a significant role in recent years, ensures global knowledge of market needs and societal goals. The diversity of international mentors involved in the program's implementation and active in many international entrepreneurial and research initiatives provides an additional influx of information about job opportunities. Based on this type of project-educational involvement, which is centred on economic and social needs, we thoroughly updated the entire curriculum and content in 2015, and we further enriched it in 2018 with new courses and a variety of new electives.

Molecular Genetics and Biotechnology

Actuality of the contents of the existing program and integration of new knowledge: The doctoral program, which aims to train professionals in the broad field of life sciences, is the result of a successful collaboration between the University of Nova Gorica and the International Centre for Genetic Engineering and Biotechnology (ICGEB) in Trieste. Students enrolled in the program are thus immersed in a world-class international scientific and educational environment. The program covers a wide range of fundamental and applied knowledge in molecular biology, genetics, and advanced biotechnology. The content in all courses is constantly updated, especially in elective courses and Modern Trends in Molecular Biology and Biotechnology I-III. This course is built around lectures by world-renowned scientists who present their most recent research findings. We are also updating the program's content by expanding the number of elective courses available. We added four new elective courses in 2014, and another in 2018. In the 2017/2018 academic year, we also updated the content and title of the elective course Regenerative Medicine and Stem Cell Technologies.

Coherence of the proposed changes with the vision and development strategy of the Faculty and the University: The proposed program changes are always consistent with the basic strategy of the Graduate School and the University of Nova Gorica, which promotes close integration of programs with the University of Nova Gorica's research laboratories, centres, or institutes, as well as other research institutions at home and abroad. Doctoral programs are primarily a creative environment in which students, professors, researchers, and experts collaborate to create new knowledge and transfer it to the business world. Changes to the program improve this type of creative environment even more.

Relationship between the contents of the study program: The compulsory courses serve as the study program's central connection, to which elective courses from various fields of bio-science and biotechnology are linked. The course Fundamentals of Molecular Biology

and Biotechnology provides a connection of basic knowledge in the first year. The course Modern Trends in Molecular Biology and Biotechnology I-III, which is a common point of very different student research projects, takes care of the vertical connection of the contents between the years. The courses Research Work I-IV and Seminar I-III are also inextricably linked in terms of content. Students in the latter acquire relevant knowledge and competencies for the analysis and presentation of research work, which they then apply in writing annual reports on the progress of research work in the course Research Work.

Consistency and content connection (compliance) of curricula goals, competencies, or learning outcomes with study program goals, competencies, and content: The study program's main goal is to educate and train professionals who will have all of the necessary knowledge for an in-depth understanding of scientific work in the field of bio-science, to develop independent thinking and critical evaluation of their work, and to develop personal responsibility and decision-making skills. Individual courses are designed to encourage students' intensive research work, seminar learning, laboratory rotation, and critical-polemical participation in discussions, all of which lead to this goal. Students gain in-depth basic knowledge through the framework of selected electives and some compulsory courses, where modern research achievements and their critical evaluation are also prioritized.

Adequacy of course distribution by semesters and years (horizontal and vertical connection) and credit evaluation: The program is linked vertically and horizontally. There are several general theoretical contents in the first year that represent the basis for knowledge of the field of later research work. Fundamentals of Molecular Genetics and Biotechnology is one such course, which is always offered at the start of the first semester. Students gain basic knowledge in this course, which is especially important given their disparate prior knowledge. Compulsory courses in the first and second years are supplemented by elective courses chosen by students based on their research field and providing in-depth knowledge of the student's narrower professional field. Due to the acquisition of fundamental knowledge, there is slightly less research work in the first two years. The study focuses on students' research work in the third and fourth years, as well as training for critical evaluation of results and effective presentation of research work (Research work III and IV and Seminar III). The course concludes with the presentation of a doctoral dissertation. Vertical connectivity is most visible in the courses Research Work I-IV and Seminar I-III. In these courses, the acquisition of relevant competencies and knowledge can be traced throughout the course of study. The annual evaluation always includes a comparison of progress to the previous year.

Credit valuation of courses is appropriate. According to the Student Workload Survey, only the course Modern Trends in Molecular Biology and Biotechnology, which requires intensive independent preparation for seminars and debate clubs, is expected to have a lower workload (Journal Clubs). We have already introduced additional methods of assessing independent work in this course, which should motivate students even more.

Adequacy of the implementation of the study program, methods and forms of pedagogical work and student work: The program envisions students acquiring fundamental knowledge in general and elective courses, conducting intensive research,

participating in seminars, and participating in critical and polemical discussions. There are few organised forms of study, and even these are tailored to individual students' needs through a diverse range of electives. A strong emphasis is placed on research, data processing and analysis, and the development of communication skills. Students' responses indicate that this method of working suits them because they can devote themselves in depth to their research work and narrower professional field. We are aware that a high volume of independent work necessitates continuous monitoring of students. The annual evaluation of research work and acquired competencies is dedicated to this before a three-member permanent commission, which monitors students' progress and guides them in their future work.

Adequacy of study materials, introduction of electronic study materials for e-study and distance learning: The study material in the program is prescribed within the curricula. With the exception of the course Basics of Molecular Biology and Biotechnology, where the basic literature consists of widely recognized textbooks, the literature in other courses is updated annually and is mostly in the form of review and research articles in the relevant field. For e-learning purposes, students can follow some activities online. Examples include seminars at UNG (Scientific Evenings) and ICGEB within the course Modern Trends in Molecular Biology and Biotechnology;

UNG Science Evenings:

<https://www.youtube.com/playlist?list=PLA2CC4F52ADAAA7F5&feature=plcp>

ICGEB seminars: <https://www.icgeb.org/outreach/podcasts/>

Distance learning is possible through student communication with course holders via e-mail, particularly in directing and monitoring individual work.

Evaluation of student workload, progress and completion of studies: Student workload evaluation is conducted annually through the Student Workload Survey. As surveys still do not reach all students, part of the introductory meeting at the start of each academic year, which brings all students and the program director together, is also devoted to this topic.

Following the revision and simplification of the surveys, the student workloads are shown to be mostly within the planned limits. Workloads in research were found to be slightly higher, particularly among students who receive scholarships at their home research institutions. The course Modern Trends in Molecular Biology and Biotechnology, which is largely based on students' independent preparation, has lower-than-expected workloads. In general, students advance successfully to higher years. The most significant obstacle is the sufficient amount of research work, which causes some students to suspend or discontinue their studies. This is especially common among students employed in an entrepreneurial environment. The length of study for these students is also longer. The average length of study for students conducting research at UNG, ICGEB, or other research organisations is less than 4 years.

Obtaining the desired competencies or learning outcomes: Individual course holders are primarily responsible for monitoring the attainment of competencies and learning outcomes. The program's average grade is higher than 9, indicating that learning outcomes have been met successfully. Furthermore, the majority of graduates continue their research work in research institutions or biotechnology companies, which is a good indicator of successfully acquired competencies for research and development work in molecular biology and biotechnology.

Adequacy of knowledge testing and assessment: We introduced a numerical assessment scale for all elective courses and the compulsory course Seminars I, II, and III during the program renewal in 2014, whereas in other courses, due to the content and organisation of courses, assessment is based on a pass/fail system. Numerical assessment has proven to be very appropriate in theoretical electives, as students are more motivated to complete course obligations and participate actively. Numerical assessment is also very successful in the Seminars I, II, and III courses, where students submit a report on their research work and present it to the commission. Assessments in this course are structured by different segments, which is very beneficial to students' progress because it allows them to see which aspects of their research work and presentations need to be improved.

The program's examination is heavily weighted toward independent work, which the student presents in the form of project reports, public presentations of results, and critical and polemical discussions. The student completes their studies by presenting their doctoral dissertation to a three-member commission.

Enrolment analysis: Enrolment in the program has recently declined significantly. This has been especially evident in the last three years since we were excluded from receiving state co-financing for doctoral tuition fees. We had a stable student structure prior to that, with an increasing proportion of domestic students. Tuition fees for the program are now significantly higher than tuition fees for other comparable studies in Slovenia, especially after the program was extended to four years. Despite the high level of interest in students from abroad, only a small number of candidates enrol in the program. Because there has been a significant decrease in places for young researchers in recent years, and because the institution does not have a suitable program, the study is mostly available only to students who receive scholarships from various companies. Despite our best efforts, we can only gain a small number of new students in this manner. Only a stable source of student funding will allow us to see an increase in enrolment in the future. A general reduction in tuition fees per year, or at least a reduction in tuition fees in the final year of study, would also help the program's competitiveness.

Verification and analysis of graduates' employability: Verification and analysis of the employability of graduates is determined by the UNG Career Centre. According to surveys, students have a very poor understanding of the function and operation of the Career Centre, which should definitely be improved with more information. According to Career Centre analyses, the employability of UNG graduates after 6 months is higher than 80%, and higher than 90% in the doctoral program. Most graduates from the business environment continue to work for a company. Students from research organisations usually go to

postdoctoral training at another organisation, and some of them look for jobs in companies that match their professional qualifications.

Identifying new knowledge needs and employment opportunities in the environment, labour market needs, or societal knowledge needs: The program is constantly adapting to new knowledge and labour market needs. A set of electives tailored to the needs of the individual student provides the most flexibility. We introduced a new elective course Selected Chapters in Biomedicine and Biotechnology in the previous academic year at the request of students, as it became clear that there is a lack of in-depth content in this rapidly developing field. Similarly, we have updated the course of Regenerative Medicine and Stem Cell Technologies due to rapid advances in knowledge.

Through close collaboration with companies in the wider Gorizia and cross-border region, we continuously monitor labour market needs. We also have formal cooperation agreements with some of them. We currently have 2 female students who work in research groups within companies.

We also advise all students on how to make the most of the program's modularity in order to acquire appropriate competencies for the current labour market and societal knowledge needs.

Cognitive Language Sciences

Actuality of the contents of the existing program and integration of new knowledge: The program educates and trains students in the core areas of formal linguistic theory, syntax, semantics, and phonology - all within generative grammar - as well as in the broader cognitive language sciences, such as psycholinguistics, neurolinguistics, and other areas of experimental linguistics. The curriculum consists of meeting study obligations as well as writing and presenting a doctoral dissertation orally. Staff members teach doctoral courses. Furthermore, the program includes a variety of topics dealing with current trends in phonology, syntax, semantics, pragmatics, psycho- and neurolinguistics, and computational linguistics. These courses, which take the form of mini courses, are taught by leading international researchers. For all courses, the content is constantly updated. Students are actively involved in research from the start of their doctoral studies, which they do in collaboration with the program staff. Linguists from other universities are frequently invited to participate in organised discussions to present their new work.

Coherence of the proposed changes with the vision and development strategy of the faculty and the University: Changes to the program are always in line with the overall strategy of the Graduate School and the University of Nova Gorica, and they contribute to a better integration of the program with research at the Centre for Cognitive Language Sciences and other research institutions both at home and abroad.

Relationship between the contents of the study program: The compulsory courses ensure the horizontal coherence of the study program, to which elective courses from various fields of theoretical and experimental linguistics and cognitive science are linked. Individual Research Work I-III and Seminar Workshop I-II allow for vertical content connections between study years. Students gain relevant knowledge and skills for analysing research work and presenting it.

Consistency and content connection (compliance) of curricula goals, competencies, or learning outcomes with study program goals, competencies, and content: The goals and competencies set out in the curricula are in line with the goals and competencies of the study program. The program's doctoral student must have a good understanding of the scientific approach to linguistics in the context of modern cognitive science, as well as detailed knowledge of a specific field of cognitive science of the language in which they specialize. Doctoral students in this program are capable of conducting independent research in any field of theoretical and experimental linguistics and cognitive language sciences, particularly within their chosen specialization, as well as applying and leading research projects within the topic for which they specialize and applying acquired linguistic knowledge in practice.

Adequacy of course distribution by semesters and years (horizontal and vertical connection) and credit evaluation: The program is linked vertically and horizontally. The majority of the theoretical content in the first year is in the central areas of formal linguistic theory and experimental linguistics, which includes courses in syntax, semantics, and phonology, as well as psycholinguistics, which serves as the foundation for knowledge of subsequent research. Compulsory courses in the first and second years are supplemented by elective courses chosen by students based on their research field and providing in-depth knowledge of the student's narrower professional field. Elective courses deal with contemporary trends in phonology, syntax, semantics, pragmatics, psycho- and neurolinguistics, and computational linguistics. Individual research begins in the first year and continues through the second and third years. The study focuses on student research work in the third and fourth years. Individual Research Work I-III and Seminar Workshop I-II allow for vertical content connections between study years. Students gain relevant knowledge and skills for analysing research work and presenting it. The study program concludes with the presentation of a doctoral dissertation.

Adequacy of study program implementation, methods and forms of pedagogical work, and student work: The first year of study and the first semester of the second year takes place mostly in an organised form. Elective courses dealing with contemporary trends in phonology, syntax, semantics, pragmatics, psycho- and neurolinguistics, and computational linguistics usually take the form of mini-seminars. Students are actively involved in research from the start of their doctoral studies, which they do in collaboration with the program staff. In addition to the ECTS credits obtained in the first and second years, the preparation of the topic of the doctoral thesis, as approved by the doctoral program's scientific council, is required for enrolment in the third year (3-year study program). This division of study forms provides students with a broad view of different aspects of modern theoretical and experimental linguistics, as well as flexibility in selecting the topic of research work for the dissertation.

Adequacy of study materials, introduction of electronic study materials for e-study and distance learning: The majority of the program's required courses are delivered via the e-learning platform Moodle, which is actively used by both domestic and international lecturers. For e-learning purposes, students can follow these courses online. Modern textbooks (such as Introduction to Psycholinguistics or Introduction to Cognitive Sciences) as well as articles published in influential international journals and collections are used as

course materials in both compulsory and elective courses, and students are informed about the most recent advances in relevant research areas.

Evaluation of student workload, progress and completion of studies: Student workload evaluation is conducted annually through the Student Workload Survey.

Obtaining the desired competencies or learning outcomes: Individual course holders are responsible for monitoring the attainment of competencies and learning outcomes. Grades in the program are higher than 8, indicating that learning outcomes have been met successfully. Students successfully apply for international conference participation and publish their research work in domestic and foreign journals and collections, indicating that they have successfully acquired competencies for research work in theoretical and experimental linguistics.

Adequacy of knowledge testing and assessment: Most compulsory and elective courses in the program are graded numerically (on a scale of 5 to 10), and individual research work is graded based on a pass/fail system. This grading system has proven to be clear and transparent to students, including international students. The student must complete each course with at least an 8 in accordance with the Graduate School' conditions for admission to the presentation of the dissertation.

Enrolment analysis: Despite the constant interest from potential students at home and abroad, the suspension of state co-financing of tuition fees for doctoral studies had a significant impact on enrolment in the doctoral program. Only a stable source of student funding will allow us to see an increase in enrolment in the future.

Verification and analysis of graduates' employability: Verification and analysis of the employability of graduates is determined by the UNG Career Centre.

Identifying new knowledge needs and employment opportunities in the environment, labour market needs, or societal knowledge needs: The program is constantly adapting to new knowledge and labour market needs. As an example, in recent years in the field of cognitive language science, an experimental field that studies language competence and use on the basis of experimental work has grown significantly. This advancement necessitates additional competencies in experimental linguistics and data analysis, so the content of compulsory and elective courses is always updated to include materials related to experimental aspects, unless otherwise specified in the curriculum.

Materials

Actuality of the contents of the existing program and integration of new knowledge: The doctoral program Materials was created with a global perspective of socioeconomic and environmental changes that affect the need for new materials in mind. This knowledge is required for the doctoral student to analyse and solve complex technological and economic situations at the strategic and operational levels in the field of materials for the new millennium.

Coherence of the proposed changes with the vision and development strategy of the faculty and the University: The proposed program changes are always consistent with the overall strategy of the Graduate School and the University of Nova Gorica.

Relationship between the contents of the study program: Elective courses in the first and second years provide students with education in a variety of material fields, as well as areas with a focus on the targeted use of materials in industry. Electives in the Materials program also provide education in the field of advanced characterization methods, which are primarily represented among the electives of the already accredited doctoral program in Physics and are also available to doctoral students in Materials. The 'Seminar' course is a core course that exposes all students to this broad knowledge.

The consistency and content connection (compliance) of the curricula's goals, competencies, or learning outcomes with the goals and competencies of the study program and its content:

The study program, based on its composition and content, provides students with comprehensive knowledge and enables them to achieve goal setting and planned competencies or learning outcomes. The course descriptions demonstrate the consistency and content connection of individual courses and curricula as well as the overall study program. Individual course goals and competencies or learning outcomes are aligned with the study program's goals and competencies and correspond to the level and type of study.

Adequacy of course distribution by semesters and years (horizontal and vertical connection) and credit evaluation: The program is linked vertically and horizontally. In the first and second years, compulsory and elective courses, as well as research work take place, whereas only research work takes place in the third and fourth years. Credit valuation of courses is appropriate.

Adequacy of the implementation of the study program, methods and forms of pedagogical work and student work: The implementation of the study program is appropriate. Because the University of Nova Gorica's orientation is that lecturers perform research and pedagogical work in a balanced proportion, higher education teachers perform both educational and scientific and research professional work.

Adequacy of study materials, introduction of electronic study materials for e-study and distance learning: The curriculum ensures that the doctoral student is constantly in contact with new, current study material in the fields of basic material knowledge as well as current problems of their targeted use, as encountered by experts in the field of materials of the new millennium. Except in exceptional circumstances, such as the coronavirus outbreak in 2020 and 2021, the program is not implemented remotely. The program was implemented in the spring semesters of the academic years 2019/2020 and 2020/2021 using online e-learning tools (e.g., the MiTeam platform), which are already in use at UNG in other study programs.

Evaluation of student workload, progress and completion of studies: The four-year program strikes an ideal balance between student obligations and the time available to complete their studies.

Obtaining the desired competencies or learning outcomes: Individual course holders are primarily responsible for monitoring the attainment of competencies and learning outcomes. The program's average grade is higher than 9, indicating that learning outcomes have been met successfully.

Adequacy of knowledge testing and assessment: Criteria and methods for checking and assessing students' learning outcomes for each course are evident in the curricula and are documented on the UNG website, as are other programs in the Graduate School. The purpose of knowledge testing and assessment is to promote student learning and measure student achievement to learning outcomes in order to achieve valid, reliable, fair, transparent, and unbiased values.

Enrolment analysis: Enrolment in the first two years is appropriate and consistent with laboratory-based research projects.

Verification and analysis of graduates' employability: Graduates are expected to have high employability as researchers at institutes or universities as well as in industry. Graduates will be able to analyse and solve complex technological and economic situations at the strategic and operational levels in the field of materials for the new millennium.

Identifying new knowledge needs and employment opportunities in the environment, labour market needs, or societal knowledge needs: The content of the doctoral program Materials is harmonized with the needs of the environment. Graduates of the Materials doctoral program will always be able to work in research institutes and universities both at home and abroad, where they will build an academic scientific career in the field of materials science. They will represent the highest management positions in industrial development departments both at home and abroad, dealing with substantive issues such as the development of new technologies and products, as well as the company's strategic orientations.

3.3 CHANGES IN STUDY PROGRAMS IN 2020/2021

This chapter presents proposals for updating the content of third-level study programs offered by the Graduate School. For each study program, proposals for changes or updates to the program's content and structure, methods and forms of pedagogical work, and student work are provided.

The faculty evaluates and updates the study program's content, composition, and implementation on a regular basis. All changes and updates are based on the program analysis findings, which are detailed in the chapter **Implementation of study programs**, subchapter **Assessment of the situation and orientations**.

Updates to the Environmental Sciences study program

Scheduled updates: We have no plans to make any changes in the near future, as the existing education system has proven to be successful.

Implemented updates: There was no program update in the 2020/2021 academic year.

Updates to the Physics study program

Scheduled updates:

1. Elimination of the existing elective course Fundamentals of Free Electron Laser Operation
2. Replacement of the course holder in the elective course Solid State Chemistry

Justification:

1. The elimination of the elective course was proposed because we do not have a suitable habilitated institution for the existing course.
2. The third-level doctoral program in Physics is closely related to the research topics of our laboratories and centres. The course holder changed due to staff changes at the University of Nova Gorica. The proposed change has no impact on the program's fundamental characteristics or program objectives.

Implemented updates: The planned updates for points 1 and 2 have been implemented.

Change:

1. Elimination of the existing elective course Fundamentals of Free Electron Laser Operation
2. Replacement of the course holder in the elective course Solid State Chemistry: new course holder: doc. dr. Andraž Mavrič

Date of adoption by the Senate:

1. 102nd session of the UNG Senate on 7.7.2021
2. 103rd session of the UNG Senate on 15.9.2021

Date of notification to the SQAA: 9. 12. 2021

Informing students and the public (website....): Program website.

Updates to the Karstology study program

Scheduled updates: Changes in course holders in some courses.

Justification: Two course holders have retired.

Implemented updates: The UNG Senate adopted the proposed replacements.

Change: Change of course holders in the courses History of Karstology and Speleology, History of Karst Theories (Hydrology of Karst), History of Karst Theories (Morphology of Karst), Dinaric Karst, Geomorphology of Karst and Use and protection of karst surface.

Date of adoption by the Senate: For the first three courses at the 103rd session of the UNG Senate on 15. 9. 2021, and for the other three at the 104th session of the UNG Senate on 17. 11. 2021.

Date of notification to the SQAA: For the first three courses on 8. 10. 2021, and for the other three courses on 22. 11. 2021.

Informing students and the public (website...):

<http://www.ung.si/sl/studij/fakulteta-za-podiplomski-studij/> and

<http://www.ung.si/en/study/graduate-school/> and

<http://www.ung.si/sl/studij/fakulteta-za-podiplomski-studij/studij/3KR/>

and <http://www.ung.si/en/study/graduate-school/study/3KR/> .

Updates to the Humanities study program

Scheduled updates: Change in course holders of two elective courses and course holders of research seminars. Curriculum update.

Justification: The changes in course holders were caused by staff changes and habilitation procedures.

Implemented updates: All of the updates listed above have been implemented.

Change:

Replacement of course holders of two existing electives:

1. Identity and Language, 3IK061

Current holder: doc. dr. Danila Zuljan Kumar;

New holder: prof. dr. Jožica Škofic, ZRC SAZU

2. Gender and Literature, 3IK060

Current holder: doc. dr. Alja Adam;

New holder: prof. dr. Katja Mihurko Poniž, UNG.

Update of the curricula of two courses:

- Research seminar, I 3IK041 (holder:izr. prof. dr. Ana Toroš)
- Research seminar II 3IK043 (holder:izr. prof. dr. Ana Toroš)

Date of adoption by the Senate: 15. 9. 2021

Date of notification to the SQAA: 29. 11. 2021

Informing students and the public (website): on the program's website (29. 11. 2021)

Updates to the Cultural Heritage Studies study program

Scheduled updates: We made a clear distinction between a one-year advanced improvement program and a doctoral study based on the instructions of the SQAA sample evaluation, which was completed in November 2019. The program was not updated in

2020/21, with the exception of the implementation of remote activities due to the Covid - 19 crisis.

Justification: Instructions of the SQAA sample evaluation.

Implemented updates: A clear separation between the one-year joint second-level Master's program in Economics and Techniques for the Conservation of the Architectural and Environmental Heritage and the four-year doctoral program in Cultural Heritage Studies.

Change:

Date of adoption by the Senate: 2020/21 tender and GS Action Plan adopted by the Senate on 13. 1. 2021

Date of notification to the SQAA: Report on compliance with the recommendations of the SQAA Council of 14. 6. 2021 (association: Call for reporting 6034-23/2019/12 of 20. 5. 2021)

Informing students and the public (website...): <http://www.ung.si/en/study/graduate-school/study/>
<http://www.ung.si/sl/studij/fakulteta-za-podiplomski-studij/studij/>

Updates to the Molecular Genetics and Biotechnology study program

In the 2020/21 academic year, there were no changes made to the Molecular Genetics and Biotechnology study program.

Updates to the Cognitive Language Studies study program

Due to the emergency situation caused by the Covid-19 epidemic, the study process was completed entirely at a distance during the 2020/21 academic year. There were no other changes or updates made to the Cognitive Science study program.

Updates to the Materials study program

Scheduled updates: We requested the introduction of two new courses, namely *Quantum Chemical Modelling: Density Functional Theory* and *Biocatalysis: Chemical Physics of Enzyme Reactions*

Justification:

We already had the course *Multi-scale Materials Modelling and Engineering* on the syllabus, which included a small portion of density functional theory-based quantum chemical modelling (DFT). Multi-scale modelling is a method, particularly in *chemical engineering*, of describing developments in chemical transformation on multiple levels. DFT is one part of multi-scale modelling. DFT is the most popular method in quantum chemistry used to

calculate the electronic structure of multi-atom systems. It is primarily used to describe a system at the atomic level in *materials and chemistry (including physics)*. Most multi-scale modelling listeners are not expected to be particularly interested in quantum theory (DFT), nor do they require in-depth knowledge. Listeners who are interested in quantum chemistry and events at the atomic level, on the other hand, will often not use multi-scale modelling at all, but will instead investigate the magnetism of materials, charge transfer, and so on. As a result of the foregoing, we proposed to the Senate separate courses on DFT and multi-scale modelling. We reduced the DFT to the most important part of the course, Multi-scale Materials Modelling and Engineering, and reduced the course from 12 ECTS to 9 ECTS. We proposed and evaluated a new course in quantum chemical modelling (DFT) with 6 ECTS.

In addition, we wanted to add a new course to the curriculum called *Biocatalysis: Chemical Physics of Enzymatic Reactions*. Enzymes are natural catalysts, and if we understand their behaviour, we can apply it to materials that act as catalysts, as discussed in the study program Materials.

Implemented updates: Both new courses that were proposed were implemented.

Change: The Senate agreed to add two new courses; *Quantum Chemical Modelling: Density Functional Theory* and *Biocatalysis: Chemical Physics of Enzyme Reactions*. The courses were included in the doctoral program's curriculum.

Date of adoption by the Senate: 101st session of the Senate on 12. 5. 2021

Date of notification to the SQAA: 9. 12. 2021

Informing students and the public (website...): We informed students and the general public about new courses on the syllabus via the website and at doctoral program promotional events.

3.4 CHANGES IN STUDY PROGRAMS IN 2019/2020

All doctoral programs

Scheduled updates:

Changes and additions in the implementation of organised forms of study in all doctoral study programs of the Graduate School

Justification:

We wanted to make it possible for students with special needs and all students who are unable to attend a traditional lecture course due to an emergency (e.g., the Covid-19 pandemic) or for objective reasons to attend live lectures and seminars via videoconferencing. The video conferencing system enables two-way communication. We also enable all students to communicate with their mentors and lecturers at a distance on a

regular basis during speaking hours and consultations using a videoconferencing system. All students are provided with access to e-learning materials and tasks to help them achieve the desired learning outcomes.

In the above cases, we also enabled students to take the planned examinations in the form of oral exams, seminar presentations, and dissertation presentations using a videoconferencing system.

Individual student research projects and practical exercises continue to be carried out in laboratories, libraries, archives, and the field. Students with special needs, as well as all students in emergency situations, who are unable to perform individual research work and practical exercises in laboratories, libraries, archives, or in the field due to objective reasons, are permitted to do so during periods outside the schedule, when they have access to research laboratories and other research sites (libraries, archives), as well as research equipment.

Distance learning will be implemented at UNG using unified online e-learning tools (MiTeam and Moodle virtual classrooms, as well as the additional Zoom video conferencing platform), enabling two-way interactive video connections between teachers and students and student access to relevant multimedia learning materials in virtual classrooms. UNG lecture halls are well-equipped with video conferencing equipment, allowing for simultaneous two-way communication between the teacher and students present in the classroom and those present via videoconferencing. All users (teachers, students, and professional services) of the UNG IT service receive appropriate information and technical support. Simultaneously, trainings on the use of online tools and applications for e-learning are being organised.

Implemented updates: The proposed changes and amendments to the implementation of organisational forms of study at the Graduate School were approved by the UNG Senate.

Change:

Students with special needs, as well as all students who are unable to attend the planned organised forms of study (lectures, seminars) in the lecture hall due to an emergency or for objective reasons, can attend live lectures and seminars remotely via videoconferencing system, alongside the students who are in the lecture hall. The video conferencing system enables two-way communication. We also enable all students to communicate with their mentors and lecturers at a distance on a regular basis during speaking hours and consultations using a videoconferencing system. All students were provided with access to e-learning materials and tasks to help them achieve the desired learning outcomes.

In the above cases, we also enabled students to take the planned examinations in the form of oral exams, seminar presentations, and dissertation presentations using a videoconferencing system.

Individual student research projects and practical exercises continue to be carried out in laboratories, libraries, archives, and the field. Students with special needs, as well as all students in emergency situations, who are unable to perform individual research work and practical exercises in laboratories, libraries, archives, or in the field due to objective reasons, are permitted to do so during periods outside the schedule, when they have access

to research laboratories and other research sites (libraries, archives), as well as research equipment.

Distance learning will be implemented at UNG using unified online e-learning tools (MiTeam and Moodle virtual classrooms, as well as the additional Zoom video conferencing platform), enabling two-way interactive video connections between teachers and students and student access to relevant multimedia learning materials in virtual classrooms. UNG lecture halls are well-equipped with video conferencing equipment, allowing for simultaneous two-way communication between the teacher and students present in the classroom and those present via videoconferencing. All users (teachers, students, and professional services) of the UNG IT service receive appropriate information and technical support. Simultaneously, trainings on the use of online tools and applications for e-learning are being organised.

I propose to the UNG Senate that the following amendments to the doctoral study programs (third-level) be approved for all doctoral study programs (third-level) carried out within the Graduate School at UNG:

- Environmental Sciences
- Physics
- Materials
- Cognitive Language Sciences
- Karstology
- Molecular Genetics and Biotechnology (third level)
- Humanities
- Cultural Heritage Studies

and for the one-year improvement program:

- Economics and Techniques for the Conservation of the Architectural and Environmental Heritage

Date of adoption by the Senate: 97th session of the UNG Senate on 16. 9. 2020

Date of notification to the SQAA: It is not intended to include information about the forms and methods of teaching in doctoral programs in the e-book (Chapter C2).

Informing students and the public (website...): GS website.
<http://www.ung.si/sl/studij/fakulteta-za-podiplomski-studij/ucenje/>

and the UNG website:
<http://www.ung.si/sl/e-ung/>

Updates to the Environmental Sciences study program

Scheduled updates: We do not plan any further updates to the content of the programs after extending the duration of doctoral programs from three to four years, but rather the intensive use of video communication systems, especially after the outbreak of the Covid-19 epidemic at the UNG level.

Justification: The current program is already based on individual education to the greatest extent possible, while also being involved in larger program groups/projects. Content updates will be made if the need for change becomes apparent in the future.

Implemented updates: As previously stated, updates to the mode of communication were implemented in the spring of 2020 in accordance with the UNG leadership's instructions.

Informing students and the public (website...): We inform students about the contents and conditions of their studies via the UNG official website- <http://www.ung.si/sl/> oz. <http://www.ung.si/en/>.

Updates to the Physics study program

Scheduled updates:

- 1.) Change of course holder in the course Contemporary cosmology
- 2.) Appointment of a new program director, replacement of course holders: Seminar, Research work I, II, III, IV, Dissertation
- 3.) Curriculum change in the study program Physics (third-level) as follows:
 - elimination of courses: Networkless and other Advanced Numerical Methods, Heat and Matter Transfer-Theoretical Bases and Numerical Solution, Numerical Modelling of Materials and Processes, and Selected Chapters in the field of Modern Materials,
 - introduction of new courses: Selected chapters in Statistical Physics and Fundamentals of Free Electron Laser Operation,
 - changes in the scope of the Laboratory of Scanning Electron Microscopy course from the current 3 ECTS to 6 ECTS,
 - changes in the scope of the Contemporary cosmology course from the current 6 ECTS to 12 ECTS,
 - changes in the scope of the Group Theory course from the current 9 ECTS to 6 ECTS,
 - replacement of the course holder of Selected chapters from Biophysics: new holder doc. dr. Artem Badasyan,
 - replacement of the course holder of Contemporary particle physics: new holder: doc. dr. M. Nemevšek,
 - Update of the curriculum of the Astroparticle physics course, due to new findings in the field.

Justification:

- 1.) The change of the course holder of the Contemporary cosmology course was due to staff changes.
- 2.) Because the director of the program is the course holder in Seminar, Research work I, II, III, IV, and Dissertation, the course holder in all of the above courses was changed with the appointment of a new director of the program.

3.) The third-level doctoral program in Physics is closely related to the research topics of our laboratories and centres. Changes in the priorities of research and academic work caused by the elimination of the Laboratory for Multiphase Processes course, as well as the teaching staff, necessitate a curriculum change. The proposed changes have no impact on the program's fundamental characteristics or program objectives.

Major changes

The elimination of four elective courses, the addition of two new elective courses, and changes to the scope and content of three existing elective courses are among the major changes.

The elimination of the Laboratory for Multiphase Processes course and the elimination of existing elective courses as a result of changes in UNG's research priorities are no longer relevant.

2. Introduction of two new elective courses, which are especially important for students interested in condensed matter physics (Materials, Solids, Polymers).

3. Change in the scope of courses:

Laboratory of Scanning Electron Microscopy - The course's scope was expanded by devoting more time to student practical training and data analysis. Furthermore, much more time is devoted to individual work, both in data collection and analysis and in the preparation of the experiment report. As a result, the evaluation of the course is increased from 3 to 6 ECTS.

Contemporary cosmology - We have increased the scope of the course due to the introduction of new content. Cosmology is one of the most important fields of modern physics, so it is necessary to familiarize students with it in greater depth in the Physics and Astrophysics program. We also included topics like cosmological perturbations and their probes.

Group theory - Based on our implementation thus far, we have discovered that the course also covers topics that were not required during the third-level study of physics and astrophysics. The scope of Poincare groups was removed from the submitted content.

Minor changes

1. Change of course holders: the change of course holders occurred due to staff changes at the University of Nova Gorica.

2. Curriculum update: Curriculum update due to new findings in the field of elementary particle astrophysics

Implemented updates: All planned updates under points 1), 2) and 3) have been implemented.

Change:

1.) Change of course holder in the Contemporary cosmology course, the new course holder is prof. dr. Gabrijela Zaharijas,

2.) Appointment of a new program director prof. dr. Gabrijela Zaharijas and change of course holders: Seminar, Research work I, II, III, IV, Dissertation, the new course holder in all courses is prof. dr. Gabrijela Zaharijas,

3.) Curriculum change in the study program Physics (third-level) as follows:

- elimination of courses: Networkless and other Advanced Numerical Methods, Heat and Matter Transfer-Theoretical Bases and Numerical Solution, Numerical Modelling of Materials and Processes, and Selected Chapters in the field of Modern Materials,
- introduction of new courses: Selected chapters in Statistical Physics and Fundamentals of Free Electron Laser Operation,
- changes in the scope of the Laboratory of Scanning Electron Microscopy course from the current 3 ECTS to 6 ECTS,
- changes in the scope of the Contemporary cosmology course from 6 ECTS to 12 ECTS,
- changes in the scope of the Group Theory course from the current 9 ECTS to 6 ECTS,
- replacement of the course holder of Selected chapters from Biophysics: new holder doc. dr. Artem Badasyan
- replacement of the course holder of Contemporary particle physics: new holder : doc. dr. M. Nemevšek,
- Update of the curriculum of the Astroparticle physics course, due to new findings in the field.

Date of adoption by the Senate: 6. 11. 2019 (1.), 11. 3. 2020 (2.), 8. 7. 2020 (3.)

Date of notification to the SQAA: 19. 11. 2020

Informing students and the public (website...): website

<http://www.ung.si/sl/studij/fakulteta-za-podiplomski-studij/studij/3FI/>

Updates to the Karstology study program

In the 2019/20 academic year, there were no changes in the Karstology study program.

Updates to the Humanities study program

In the 2019/20 academic year, there were no changes in the Humanities study program.

Updates to the Cultural Heritage Studies study program

Scheduled updates: We are not planning any major updates. According to the instructions of the SQAA sample evaluation, which was completed in November 2019, we intend to create a clear separation between the one-year advanced improvement program and the doctoral study.

Justification: Instructions of the SQAA sample evaluation.

Implemented updates: There was no program update in this academic year.

Informing students and the public:

<http://www.ung.si/sl/studij/fakulteta-za-podiplomski-studij/studij/3SKD/>

Updates to the Molecular Genetics and Biotechnology study program

Scheduled updates: Replacement of the course holder in the Modern Trends in Molecular Biology and Biotechnology I-III course.

Justification: Course holder prof. dr. Mauro Giacca has established a new research group at King's College London and is only occasionally present at the ICGEB in Trieste. Because the three compulsory courses were implemented smoothly, a proposal was made to change the course holder.

Implemented updates: The replacement of the course holder was realized in the 2019/2020 academic year.

Change: Change of the course holder in the Modern courses in molecular biology and biotechnology I-III course. Prof. Alessandro Marcello is appointed as the new course holder.

Date of adoption by the Senate: 94th session of the UNG Senate on 11. 3. 2020

Date of notification to the SQAA: /

Informing students and the public (website...):

<http://www.ung.si/sl/studij/fakulteta-za-podiplomski-studij/studij/3MG/>

Updates to the Cognitive Language Studies study program

We completely transferred the study process to remote learning in the second half of 2019/20 due to the emergency situation caused by the spread of the new coronavirus. There were no other changes or updates made to the Cognitive Science study program.

Updates to the Materials study program

Scheduled updates:

1. Replacement of course holders for elective courses: Multi-scale Materials Modelling and Engineering, Materials for Electrochemical Devices and Materials as Catalysts for Hydrocarbon Conversions
2. The Physics third-level study program proposed expanding the scope of the Laboratory of Scanning Electron Microscopy course from 3 ECTS to 6 ECTS.

Justification:

1. The change of course holders was due to staff changes at the Institute of Chemistry.
2. Laboratory of Scanning Electron Microscopy: The course's scope was expanded by devoting more time to student practical training and data analysis. Furthermore, much more time is devoted to individual work, both in data collection and analysis and in the preparation of the experiment report. As a result, the evaluation of the course is increased from 3 to 6 ECTS.

Implemented updates: We implemented all the planned changes.

Change:

1. Change of course holders for elective courses:
 - Multi-scale Materials Modelling and Engineering: the new course holder is prid. prof. dr. Miha Grilc,
 - Materials for Electrochemical Devices: the new course holder is prid. prof. dr. Nejc Hodnik,
 - Materials as Catalysts for Hydrocarbon Conversions: the new course holder is prid. prof. dr. Petar Djinović.
2. Changes in the scope of the Laboratory of Scanning Electron Microscopy course from the current 3 ECTS to 6 ECTS.

Date of adoption by the Senate: 18. 9. 2019 (1.) 11. 11. 2020 (2.)

Date of notification to the SQAA: 4. 12. 2020

Informing students and the public (website...): Program website
<http://www.ung.si/sl/studij/fakulteta-za-podiplomski-studij/studij/3MAT/>

3.5 CHANGES IN STUDY PROGRAMS IN 2018/2019

Updates to the Environmental Sciences study program

Scheduled updates: We are not planning any major updates in the near future. We entered the program's mandatory contents into the new e-SQAA system in May 2019.

Implemented updates: In the 2018/19 academic year, there were no changes in the Environmental Science study program.

Updates to the Physics study program

Scheduled updates: We do not plan any major updates after the renewal of the program.

Implemented updates: There was no program update in this academic year.

Updates to the Karstology study program

In the 2018/19 academic year, there were no changes in the Karstology study program.

Updates to the Humanities study program

In the 2018/19 academic year, there were no changes in the Humanities study program.

Updates to the Cultural Heritage Studies study program

Scheduled updates:

In 2017/18, we proposed updating and strengthening the offer of elective courses and courses, changing the title of the study program to reflect the proposed updates and expansion of research activities, and changing the conditions for completing a one-year improvement program.

Justification: Design memorable titles in accordance with the introduction of adopted updates to learning content and research areas.

Implemented updates: All changes and updates to the study program approved by the Senate in 2017/18 went into effect in 2018/19, namely: a change in the title of the *Cultural Heritage Studies* study program, a change in the conditions for completing a one-year improvement program, and the introduction of two new courses: *Sustainable historically built environment and Heritage, creativity, and tourism*.

Informing students and the public (website...): <http://www.ung.si/sl/studij/fakulteta-za-podiplomski-studij/studij/3SKD/>

Updates to the Molecular Genetics and Biotechnology study program

Scheduled updates: Replacement of the course holder in the Modern Trends in Molecular Biology and Biotechnology I-III course.

Justification: Course holder prof. dr. Mauro Giacca has established a new research group at King's College London and is only occasionally present at the ICGEB in Trieste. Because the three compulsory courses were implemented smoothly, a proposal was made to change the course holder.

Implemented updates: The realization is planned for 2019/2020.

Updates to the Cognitive Language Studies study program

In the 2018/19 academic year, there were no changes to the Cognitive Language Science study program.

3.6 CHANGES IN STUDY PROGRAMS IN 2017/2018

Updates to the Environmental Sciences study program

Scheduled updates: Changes of course holders in some lecturers who are no longer employed at UNG.

Justification: It is difficult to implement some courses whose holders are no longer employed at UNG.

Implemented updates: Three course holders on the program have been replaced.

Change 1: Change of the course holder in the Modern Trends in Environmental Science course. The new course holder is izr. prof. Valentina Turk.

Date of adoption by the Senate: 81st session of the Senate of the University of Nova Gorica on 17. 1. 2018.

Date of notification to the SQAA: /

Change 2: Change of the course holder in the Selected chapters from nature protection and biodiversity conservation course. The new course holder is izr. prof. Valentina Turk.

Date of adoption by the Senate: 81st session of the Senate of the University of Nova Gorica on 17. 1. 2018.

Date of notification to the SQAA: /

Change 3: Change of the course holder in the Selected chapters from soil pollution course. The new course holder is izr. prof. Ario de Marco.

Date of adoption by the Senate: 83rd session of the Senate of the University of Nova Gorica on 17. 5. 2018.

Date of notification to the SQAA: /

Informing students and the public (website...):

<http://www.ung.si/sl/studij/fakulteta-za-podiplomski-studij/studij/3OK/>

Updates to the Physics study program

Scheduled updates: We do not plan any new updates after the renewal of the program.

Implemented updates: There was no program update in this academic year.

Updates to the Karstology study program

Scheduled updates:

We do not intend to make any changes in the near future that would necessitate University Senate approval.

Implemented updates:

Last year, we included Professor Luiz Eduardo Panisset Travassos from Brazil to the list of lecturers with a new elective course called Physical and cultural aspects of karst areas in tropical environments.

Change: New elective course introduced.

Date of adoption by the Senate: 84th session of the Senate of the University of Nova Gorica on 4. 7. 2018. A new elective course is being announced in the 2018/2019 academic year.

Date of notification to the SQAA: 10. 10. 2018

Informing students and the public (website...):

<http://www.ung.si/sl/studij/fakulteta-za-podiplomski-studij/studij/3KR/>

Updates to the Humanities study program

Scheduled updates: Introduction of a new elective course Selected Chapters in Digital Humanities.

Justification: Introduction of an elective course that upgrades the contents of the second-cycle study program Digital Humanities.

Implemented updates: New elective course introduced.

Change: Expanding the range of elective courses.

Date of adoption by the Senate: 82nd session of the Senate of the University of Nova Gorica on 7. 3. 2018. A new elective course is being announced in the 2018/2019 academic year.

Date of notification to the SQAA: 23. 3. 2018

Informing students and the public (website...):

<http://www.ung.si/sl/studij/fakulteta-za-podiplomski-studij/studij/3HUM/predmet/289577/izbrana-poglavja-iz-digitalne-humanistike/>

<http://www.ung.si/en/study/graduate-school/study/3HUM/course/289577/selected-topics-in-digital-humanities/>

Study program updates Economics and Techniques for the Conservation of the Architectural and Environmental Heritage/Cultural Heritage Studies (from 1.10.2018)

Updates to the study program Economics and Techniques for the Conservation of the Architectural and Environmental Heritage

Scheduled updates:

- Change of title of the four-year doctoral program *Economics and Techniques for the Conservation of the Architectural and Environmental Heritage (ETCAEH)* to *Cultural Heritage Studies*.

- Modernization of elective courses and introduction of new courses, namely: implementation of *Sustainable Historical Environment and Heritage, creativity and tourism* and the introduction of four new courses, namely *Sustainability of Heritage: Advanced Chapters, Historical Cultural Areas: Advanced Chapters, Contemporary Trends in Cultural Heritage Tourism* and *The Economics of Cultural Heritage and Creativity: Advanced Chapters*.
- Change of conditions for the completion of a one-year education program

Justification:

1. In more than a decade of implementing the program, pedagogical and research activities have greatly exceeded the scope of two basic areas of activity: architecture and construction, and economics and management. The presence and role of other knowledge and broader competencies is most visible in the dissertation topics and areas discussed. As fundamental areas of interest of study, interpretation, understanding, protection, management, and planning of heritage are equally based on other scientific disciplines of humanities, social sciences, and natural sciences, which was not apparent under the previous title. We increased visibility and emphasized the difference between a four-year doctoral program and a one-year improvement program by changing the title of the doctoral study, which will continue to be implemented under the title *Economics and Techniques for the Conservation of the Architectural and Environmental Heritage*.
2. Two doctoral courses were offered: *Techniques and Materials*, which focuses on techniques, materials, and methods for the restoration and preservation of individual typologies of architectural heritage, and *Economics and Management*, which focuses on cultural or architectural heritage management in a broader spatial context as a key component of economic and social development. The current pedagogical offer was conceived primarily in 2005, but it almost entirely takes into account and follows the *Recommendations of the European Strategy for Cultural Heritage in the 21st Century*, which was adopted by the Council of Europe in February 2017. As a result, the goal of introducing new courses was to strengthen existing content in accordance with European guidelines for cultural heritage strategy, as well as to highlight the diversity of pedagogical offer and study options in the doctoral program. The new content will ensure synergies between existing tools and traditional orientations in heritage studies, as well as the contemporary challenges of the environmental, social, and economic crisis. The proposed curriculum will improve or supplement the existing offer by including content on demographic and environmental challenges, mass tourism expansion, participatory and ecological design, and sustainable management and planning. The strategy is based on emphasizing the use of heritage goods to promote community, diversity, and participatory governance, as well as strengthening the role of local and global resources and the contribution of heritage to spatial and economic sustainable development, the role of tourism as a factor in employment and reducing economic disparities through the integration of research and innovation based on eco-design, co-natural solutions, and urban renaturation (*EU Research and Innovation Policy Agenda for Nature-Based Solutions and Re-Naturing Cities*). We intend to take

into account the third set of cultural heritage strategies in the field of knowledge and education, with a focus on lifelong learning, by introducing new courses.

3. To date, completing a one-year master's program has been subject to nearly the same conditions and difficulty standards as completing or presenting a dissertation, which exceeds the conditions for completing related one-year programs abroad or second-cycle masters. The student has a maximum of six months in the one-year advanced improvement program, which is evaluated with 60 ECTS, to write a comprehensive master's thesis, consisting of Project work and Research work, for which they receive a total of 21 ECTS (6 ECTS for Project work and 15 ECTS for Research Work). Furthermore, the use of external foreign evaluators, using the same criteria as for dissertation evaluation, is reflected in the expected outcomes of master's theses, which frequently exceed hours, credits, and required standards in terms of content, research, time, and professionalism.

Implemented updates:

1. Change of title of the four-year doctoral program *Economics and Techniques for the Conservation of the Architectural and Environmental Heritage (ETCAEH)* to *Cultural Heritage Studies*.
2. Modernization of elective courses and introduction of new courses, namely: implementation of *Sustainable Historical Environment and Heritage, creativity and tourism* and the introduction of four new courses, namely *Sustainability of Heritage: Advanced Chapters, Historical Cultural Areas: Advanced Chapters, Contemporary Trends in Cultural Heritage Tourism* and *The Economics of Cultural Heritage and Creativity: Advanced Chapters*.
3. Change in the conditions for completing a one-year education program, and thus change in the course Research work I.

Change:

1. New title of the four-year doctoral program: *Cultural Heritage Studies*

Date of adoption by the Senate: 83rd session of the Senate, on 17. 5. 2018

Date of notification to the SQAA: 30.5.2018

Informing students and the public (website....):

<http://www.ung.si/sl/studij/fakulteta-za-podiplomski-studij/studij/8ARD/>

2. Implementation of the Sustainable historically built environment and Heritage, creativity, and tourism *courses*. The conditions for successfully completing the chosen field of study are nearly identical to the conditions for successfully completing the previous two fields of study. When a student completes 51 ECTS from compulsory courses and 9 ECTS from elective courses, they have successfully completed the chosen course, with 6 ECTS from specific elective courses in the chosen course and 3 ECTS from general elective courses. Selection of specific elective courses in the field of Sustainable historically built environment consists of the existing course Selected Chapters in Conservation and Restoration Practice and two new courses Sustainability of Heritage: Advanced Chapters (course holders: prof. Stefano della Torre, Politecnico

di Milano and prof. Luigi Fusco Girard, Università Federico II) and Historical Cultural Areas: Advanced Chapters (course holders: prof. dr. Jukka Jokilehto, University of York and prof. dr. Saša Dobričić, UNG). The collection of specific elective courses in Heritage, Creativity and Tourism consists of the existing course Heritage Tourism from the Perspective of Territorial Management and two new courses Contemporary Trends in Cultural Heritage Tourism (course holder: prof. dr. Antonio Paolo Russo, University of Rovira i Virgili) and Economics of Cultural Heritage: Advanced Chapters (course holder: prof. dr. Xavier Greffe, Université Paris 1).

Date of adoption by the Senate: 84th session of the Senate, on 4. 7. 2018

Date of notification to the SQAA: 9. 7. 2018

Informing students and the public (website....):

<http://www.ung.si/sl/studij/fakulteta-za-podiplomski-studij/studij/9AR/>

3. New conditions for completing the one-year education program *Economics and Techniques for the Conservation of the Architectural and Environmental Heritage (ETCAEH)*:

A student can take a joint one-year advanced improvement program (60 ECTS) as part of a single four-year doctoral study (240 ECTS) in *Cultural Heritage Studies*, which is already valid in Italy as a second-level Master's program entitled *Economics and Techniques for the Conservation of Architectural and Environmental Heritage*.

After completing 60 ECTS from organised forms of study (36 ECTS from compulsory and 9 ECTS from elective courses) and 15 ECTS from Research Work I, the student completes the improvement study program. Students who successfully complete a one-year improvement program will be awarded a certificate of completion of a development course valid in Italy and the European Union as a Second level Master's degree by the University of Nova Gorica and the University of Venice - IUAV di Venezia - University. Change of the content of the course Research work I (course holder: prof.dr. Sasa Dobričić, UNG)

Date of adoption by the Senate: 84th session of the Senate, on 4. 7. 2018

Date of notification to the SQAA: 9. 7. 2018

Informing students and the public (website....):

<http://www.ung.si/sl/studij/fakulteta-za-podiplomski-studij/studij/9AR/>

Updates to the Molecular Genetics and Biotechnology study program

Scheduled updates:

Update the set of electives to reflect student needs and current research trends in the profession.

Justification:

Students expressed a desire for a wider range of electives in biomedicine. We also identified the need to update the existing elective course Regenerative Medicine and Stem Cell Technologies to reflect the most recent field guidelines, and we added an extended segment on tissue engineering. The title of the course was therefore changed to Regenerative Medicine and Tissue Engineering. We also proposed a new course holder because the current course holder is no longer employed at the University of Nova Gorica, making course implementation more difficult.

Implemented updates:

1. Changes to the elective course Regenerative Medicine and Stem Cell Technologies, as well as course holder replacement
2. Introduction of a new elective course entitled Selected Chapters in Biomedicine and Biotechnology

Change 1:

Change of the elective course Regenerative Medicine and Stem Cell Technologies to Regenerative Medicine and Tissue Engineering. The course holder is doc. dr. Sofija Andjelić.

Date of adoption by the Senate: 82nd session, on 7. 3. 2018

Date of notification to the SQAA: 22. 3. 2018

Informing students and the public (website...):

<http://www.ung.si/sl/studij/fakulteta-za-podiplomski-studij/studij/3MG/predmet/282664/regenerativna-medicina-in-tkivni-inzeniring/>

Change 2:

2. Introduction of a new elective course entitled Selected Chapters in Biomedicine and Biotechnology. The course holder is prof.dr. Lawrence Banks (ICGEB).

Date of adoption by the Senate: 85th session, on 19. 9. 2018

Date of notification to the SQAA: 24. 9. 2018

Informing students and the public (website...):

<http://www.ung.si/sl/studij/fakulteta-za-podiplomski-studij/studij/3MG/predmet/289113/izbrana-poglavja-iz-biomedicine-in-biotehnologije/>

Updates to the Cognitive Language Studies study program

Scheduled updates: We do not plan any new updates after the renewal of the program.

Implemented updates: There was no program update in this academic year.

4. SCIENTIFIC RESEARCH ACTIVITY

The University of Nova Gorica conducted research in four laboratories and six research centres in 2020/2021 (Laboratory for Environmental and Life Sciences, Laboratory for Organic Physics, Laboratory for Materials Research, Laboratory for Quantum Optics, Research Centre Atmosphere, Centre for Astrophysics and Cosmology, Centre for Information Technology and Applied Mathematics, Centre for Wine Research, Research Centre for the Humanities, Centre for Cognitive Language Sciences). All Graduate School associates conduct research in laboratories and research centres, or as external associates within their home organisations. This report does not include an evaluation of the research work of GS associates, but a detailed report on research work in 2020 and 2021 is presented in the **Report on the Work of the University of Nova Gorica in 2020** and the **Report on the Work of the University of Nova Gorica in 2021 on monitoring, identifying, and ensuring the quality of UNG's pedagogical and research work (UNG Self-Evaluation Report) for 2020/2021**. After the end of the calendar year, reports on the work of the University of Nova Gorica are published. They present the activities and outcomes of laboratories, institutes, and centres in both fundamental and applied research, as well as their research programs, projects, international collaboration, available equipment and premises, and bibliographic data.

The following are the research findings from programs that included doctoral students.

Environmental Sciences

Environmental Sciences students have been or are still involved in the following research laboratories:

- Laboratory for Environmental and Life Sciences - UNG
- Centre for Atmospheric Research - UNG,
- Centre for Wine Research - UNG
- Materials Research Laboratory - UNG,
- Department of Research on Organisms and Ecosystems - National Institute of Biology (NIB).
- Marine Biological Station - NIB, Piran
- Institute for Materials Research - Ljubljana
- Institute of Chemistry - Ljubljana
- Faculty of Social Sciences - UL
- Laboratory for Wine Technology and Analysis - University of Zagreb.

The Laboratory for Environmental Research, which is the primary holder of research activities involving students from the postgraduate program Environmental Sciences, has established successful cooperation at the regional, national, and international levels, as evidenced by numerous cooperation agreements through which it promotes cooperation with other higher education institutes, companies, organisations, and professional associations, as well as other important stakeholders in the field of environmental protection. The Department of Organisms and Ecosystems Research also collaborates with a number of research groups at home and abroad.

Physics

The study program is research-related to:

- UNG Atmospheric Research Centre,
- Laboratory for Physics of Organic Matter UNG,
- UNG Centre for Astrophysics and Cosmology,
- UNG Materials Research Laboratory,
- UNG Quantum Optics Laboratory,
- Institute of Chemistry, Ljubljana,
- Jožef Stefan Institute, Ljubljana.
- International School for Advanced Studies (SISSA), Trieste
- Institute for Fundamental Physics of the Universe (IFPU)

Karstology

Some students worked as young researchers at the Institute for Karst Research ZRC SAZU in Postojna, while others worked in universities or other organisations on karst projects (water supply, planning, teaching). Karstology students have the opportunity to participate and engage in various laboratories in Europe, North, Central, South America, Asia, Africa, and Australia because the Institute has been closely involved in international karstology for more than seven decades and is one of its focal points. Students can connect with all of the world's leading karstologists, karst institutes, and laboratories through the Institute, the Karst Academy, and the International Speleological Association, which are both based at the Institute for Karst Research in Postojna. Students also have the opportunity to participate in research projects in the Laboratory of Environmental and Life Sciences. The collaboration between UNG and the Institute for Karst Research in Postojna in the implementation of the doctoral program Karstology was strengthened further when UNESCO recognized the doctoral study program Karstology in 2014 as something exceptional in the world and named it the **UNESCO Chair on Karst Education (UNESCO Karstology Studies Centre)**, which is carried out by UNG in close collaboration with the ZRC SAZU Institute for Karst Research.

Humanities

Students work with mentors and top researchers from UNG's Research Centre for Humanities on their research projects. Students can also join research institutions with which the Faculty of Humanities collaborates, such as:

- Institutes of the Scientific Research Centre of the Slovenian Academy of Sciences and Arts in Ljubljana,
- EMMIR consortium partners,
- Slovenian lectureships around the world,
- Sofia University "St. Kliment Ohridski", Bulgaria - University of Patras, Greece,
- Eberhard Karls Universität Tübingen, Germany,
- University of Oldenburg, Germany,
- University of Tromsø - The Arctic University of Norway, Norway,

- University of Gdańsk, Poland,
- Universities of Brno, Prague and Pardubice, Czech Republic.

Cultural Heritage Studies

Students' research work within the framework of doctoral studies and improvement programs includes research work on international projects in the field of landscape and cultural heritage conservation led by UNG researchers, as well as research work with mentors from reputable foreign research institutions in this field.

UNG is involved in the following research networks EU H2020:

- CLIC/ Circular models Leveraging Investments in Cultural heritage adaptive reuse;
- URBiNAT/ Healthy Corridors as drivers of social housing neighbourhoods for the co-creation of social, environmental and marketable NBS
- University IUAV of Venice
 - a. LABSCO, Laboratory for Structural Sciences, IUAV, Venice, Italy (<http://www.iuav.it/SISTEMA-DE/Laboratori5/index.htm>)
 - b. LAMA, Laboratory for Analysis of Antique Materials, IUAV, Italy: <http://www.iuav.it/homepage/lama/>
- UNISCAPE, University Network for the Implementation of the European Landscape Convention
- ICCROM, International Centre for the Study of Preservation and Restoration of Cultural property.
- The Our World Heritage Initiative
- University of Venice, I (double degree & joint degree)
- University of Paris 1, La Sorbonne, Center d'Economie de la Sorbonne; Paris
- University Federico II, Naples

Molecular Genetics and Biotechnology

Students perform research work in:

- Laboratory for Environmental and Life Sciences (UNG),
- Centre for Wine Research (UNG),
- Materials Research Laboratory (UNG),
- International Centre for Genetic Engineering and Biotechnology (ICGEB), Trieste, Italy,
- Biotechnology company Bia Separation d.o.o.,
- Research Departments of the University of Ljubljana,
- COBIK Centre of Excellence (Biosensors, Instrumentation and Process Control),
- Postojna Animal Hospital
- Biotechnology company Ulisse Biomed.

Cognitive Language Sciences

Students conduct research as part of the doctoral program at UNG's Centre for Cognitive Language Sciences. There are also opportunities for our students to participate in and

collaborate with various research centres and laboratories in Slovenia (e.g., ZRC SAZU, Škrabec Foundation) and Europe, with which we collaborate at the Centre for Cognitive Language Sciences on various domestic and international research projects.

Materials

Students perform research work in UNG research laboratories:

- Laboratory for Environmental and Life Sciences (UNG)
- Laboratory for Physics of Organic Matter (UNG),
- Materials Research Laboratory (UNG),
- Quantum Optics Laboratory (UNG),

in the research laboratories of the Institute of Chemistry and the Jožef Stefan Institute.

5. STAFF CONDITIONS

Staff statistical analysis is presented for the entire GS as well as separately for each study program (*Environmental sciences, Physics, Karstology, Humanities, Cultural heritage studies, Molecular genetics and biotechnology, Cognitive language sciences in Materials*).

5.1. HIGHER EDUCATION TEACHERS, ASSOCIATES, AND SCIENTIFIC STAFF

Higher education teachers and associates who are appropriately habilitated for the field in which they work on the basis of their educational, professional, and academic qualifications carry out the educational process.

Total number of UNG employees teaching at GS as on 30. 9. 2021 and the plan of new employment in 2022 by tariff groups

Level:	V.	FTE	VI.	FTE	VII.	FTE	VIII.	FTE	IX.	FTE
Number of employees as of 30. 9. 2021									43	6.97
Number of new employments in 2022										

Number of promotions in 2021

Promotions	Higher education teachers and associates	Scientific staff	Administrative and technical staff
Regular promotions in the workplace			
Exceptional promotions in the workplace			

Number of higher education teachers employed at UNG as on 30. 9. 2021, who teach at GS

Employment relationship	Full-time professor		Part-time professor		Assistant professor		Senior lecturer		Lecturer	
	No.	FTE	No.	FTE	No.	FTE	No.	FTE	No.	FTE
Full-time employees	3	0.44	5	0.66	1	0.13				
Part-time employment relationship										
Full-time employment relationship										
Contract workers*	15	2.68	12	2.14	7	0.92				
TOTAL	18	3.12	17	2.80	7	1.05				

* FTE for contract workers calculated as (no. of lecture hours per year)/(15x2x6), for assistant professors and professors (no. of lecture hours per year)/(15x2x9) or for senior lecturers and lecturers

Number of higher education teachers employed at UNG, plan for 30. 9. 2022, who teach at GS

Employment relationship	Full-time professor		Part-time professor		Assistant professor		Senior lecturer		Lecturer	
	No.	FTE	No.	FTE	No.	FTE	No.	FTE	No.	FTE
Full-time employees	4	0.70	4	0.50	1	0.20				
Part-time employment relationship										
Full-time employment relationship										
Contract workers	16	3.00	10	1.80	5	0.70				
TOTAL	20	3.70	14	2.30	6	0.90				

0.90

Number of assistants employed at UNG on 30.9.2021, who teach at GS

Employment relationship	Assistant		AM/AS		AD	
	No.	FTE	No.	FTE	No.	FTE

Full-time employees						
Part-time employment relationship						
Full-time employment relationship						
Contract workers*						
TOTAL						

* FTE for contract workers calculated as (no. of lecture hours per year)/(15x2x10) for assistants

Number of elections to the GS in 2021 and the plan for 2022

Title	No. of employees whose election to title expired in 2020	No. all elections to title in 2020	No. employees who will be elected to title in 2021	Planned no. of all elections to title in 2021
Full-time professor	1	7		
Part-time professor		3		
Assistant professor				
Scientific worker				
Senior lecturer				
Lecturer				
Assistant with PhD				
Assistant with master's degree				
Assistant				
Lecturer				

Data by individual programs:

Number of higher education teachers, associates and researchers in the study program *Environmental sciences*

Title	2020/2021		
	Full-time	Contractual	Total
Full-time professors	2		2
Part-time professors	1	2	3
Assistant professors	1		1
Senior lecturers			
Lecturers			
Assistant with PhD			
Assistant with master's degree			
Assistant			
Total	4	2	6

Movement of full-time and contractual teachers, associates and researchers in the study program *Environmental sciences*

Year	Full-time	Contractual	Total
2016/2017	6	0	6
2017/2018	7	1	8
2018/2019	4	2	6
2019/2020	5	1	6
2020/2021	4	2	6

Number of all domestic and foreign lecturers participating in the study program
Environmental sciences *

Year	Domestic	Foreign	Total
2016/2017	6	0	6
2017/2018	7	2	9
2018/2019	5	1	6
2019/2020	6	1	7
2020/2021	6	0	6

* Also includes lecturers in the framework of Erasmus exchanges, etc., who are not included among contract or full-time employees.

Number of higher education teachers, associates and researchers
in the study program *Physics*

Title	2020/2021		
	Full-time	Contractual	Total
Full-time professors	3	2	5
Part-time professors	4	2	6
Assistant professors	1	2	3
Senior lecturers			
Lecturers			
Assistant with PhD			
Assistant with master's degree			
Assistant			
Total	8	6	14

Movement of full-time and contractual teachers, associates and researchers in the study
program *Physics*

Year	Full-time	Contractual	Total
2016/2017	7	1	8
2017/2018	8	3	11
2018/2019	8	5	13
2019/2020	6	0	6
2020/2021	8	6	14

Number of all domestic and foreign lecturers participating in the study program
Physics

Year	Domestic	Foreign	Total
2015/2016	8	7	15
2016/2017	3	5	8
2017/2018	5	6	11
2018/2019	11	2	13
2019/2020	6	0	6
2020/2021	13	1	14

Number of higher education teachers, associates and researchers
in the study program *Karstology*

Title	2020/2021		
	Full-time	Contractual	Total
Full-time professors		10	10
Part-time professors	1	4	5
Assistant professors		1	1
Senior lecturers			
Lecturers			
Assistant with PhD			
Assistant with master's degree			
Assistant			
Total	1	15	16

Movement of full-time and contractual teachers, associates and researchers in the study
program *Karstology*

Year	Full-time	Contractual	Total
2016/2017	1	16	17
2017/2018	1	17	18
2018/2019	1	17	18
2019/2020	1	17	18
2020/2021	1	15	16

Number of domestic and foreign lecturers participating in the study program *Karstology*

Year	Domestic	Foreign	Total
2016/2017	11	6	17
2017/2018	11	7	18
2018/2019	11	7	18
2019/2020	11	7	18
2020/2021	9	7	16

Number of higher education teachers, associates and researchers
in the study program *Humanities*

Title	2020/2021		
	Full-time	Contractual	Total
Full-time professors			
Part-time professors	1	1	2
Assistant professors			
Senior lecturers			
Lecturers			
Assistant with PhD			
Assistant with master's degree			
Assistant			
Total	1	1	2

Movement of full-time and contractual teachers, associates and researchers in the study program *Humanities*

Year	Full-time	Contractual	Total
2016/2017	3	8	11
2017/2018	0	9	9
2018/2019	2	4	6
2019/2020	0	4	4
2020/2021	1	1	2

Number of domestic and foreign lecturers in the study program *Humanities*

Year	Domestic	Foreign	Total
2016/2017	11	0	11
2017/2018	7	2	9
2018/2019	6	0	6
2019/2020	4	0	4
2020/2021	2	0	2

Number of higher education teachers, associates and researchers in the study program *Cultural Heritage Studies*

Title	2020/2021		
	Full-time	Contractual	Total
Full-time professors		4	
Part-time professors	1	2	
Assistant professors			
Senior lecturers			
Lecturers			
Assistant with PhD			
Assistant with master's degree	1		
Assistant	1		
Total	3	6	9

Movements of full-time and contract teachers, associates and researchers in the study program *Cultural Heritage Studies*

Year	Full-time	Contractual	Total
2016/2017	2	9	11
2017/2018	2	9	11
2018/2019	2	9	11
2019/2020	2	6	8
2020/2021	3	6	9

Number of domestic and foreign lecturers in the study program *Cultural Heritage Studies*

Year	Domestic	Foreign	Total
2016/2017	1	9	10
2017/2018	2	9	11
2018/2019	1	10	11
2019/2020	2	6	8
2020/2021	3	7	9

Number of higher education teachers, associates and researchers in the study program *Molecular Genetics and Biotechnology*

Title	2020/2021		
	Full-time	Contractual	Total
Full-time professors		3	3
Part-time professors	1		1
Assistant professors	2	1	3
Senior lecturers			
Lecturers			
Assistant with PhD	1		1
Assistant with master's degree			
Assistant			
Total	4	4	8

Movement of full-time and contractual teachers, associates and researchers in the study program *Molecular Genetics and Biotechnology*

Year	Full-time	Contractual	Total
2016/2017	4	2	6
2017/2018	4	3	7
2018/2019	4	2	6
2019/2020	4	3	7
2020/2021	4	4	8

Number of domestic and foreign lecturers in the study program *Molecular Genetics and Biotechnology*

Year	Domestic	Foreign	Total
2016/2017	5	1	6
2017/2018	6	1	7
2018/2019	6	0	6
2019/2020	7	0	7
2020/2021	7	1	8

Number of higher education teachers, associates and researchers
in the study program *Cognitive Language Sciences*

Title	2020/2021		
	Full-time	Contractual	Total
Full-time professors	1	2	3
Part-time professors	1		1
Assistant professors	1	2	3
Senior lecturers			
Lecturers			
Assistant with PhD			
Assistant with master's degree			
Assistant			
Total	3	4	7

Movement of full-time and contract teachers, associates and researchers in the study
program *Cognitive Language Sciences*

Year	Full-time	Contractual	Total
2016/2017	3	2	5
2017/2018	5	1	6
2018/2019	3	0	3
2019/2020	4	2	6
2020/2021	3	4	7

Number of domestic and foreign lecturers in the study program *Cognitive Language Sciences*

Year	Domestic	Foreign	Total
2016/2017	3	2	5
2017/2018	5	1	6
2018/2019	3	0	3
2019/2020	5	1	6
2020/2021	4	3	7

Number of higher education teachers, associates and researchers
in the study program *Materials*

Title	2020/2021		
	Full-time	Contractual	Total
Full-time professors	1	4	5
Part-time professors	2	3	5
Assistant professors		2	2
Senior lecturers			
Lecturers			
Assistant with PhD			
Assistant with master's degree			
Assistant			
Total	3	9	12

Movement of full-time and contract teachers, associates and researchers in the study program *Materials*

Year	Full-time	Contractual	Total
2019/2020	2	8	10
2020/2021	3	9	12

Number of domestic and foreign lecturers in the study program *Materials*

Year	Domestic	Foreign	Total
2019/2020	10	0	10
2020/2021	12	0	12

5. 2 ADMINISTRATIVE AND PROFESSIONAL TECHNICAL STAFF

As joint services and other support activities take place at the university level, this staff is described in the university's self-evaluation report. As a result, the chapter on administrative and professional technical staff is presented in greater depth at the university level, where the administration, the student office, the international office, the library, and the publishing house all work together as part of the joint services. The deans are employed at the faculties as the head of the faculty, as well as a professional associate and secretary.

5. 3 SITUATIONAL ANALYSIS AND ORIENTATIONS 2020/2021

Environmental Sciences

Advantages:

Flexible study program with few compulsory courses and an emphasis on individual work between the candidate and the mentor.

Shortcomings:

Generally, the system has proven to be extremely effective. Due to COVID-19, the problem in the last two years has been the restriction of physical communications or the implementation of laboratory work.

Scope for improvements:

Improvements, except at the technical level of communication, cannot be predicted or implemented as long as there are movement restrictions.

Timetable for making improvements or eliminating weaknesses:

As long as physical presence is restricted, all advancements are limited to communication links.

Physics

Advantages:

Lecturers' occupations in the study program Physics are still appropriate in terms of professionalism and lecturer quality.

The high percentage of lecturers with experience from other research institutions continues to be an advantage of the Physics study program.

Shortcomings:

We eliminated the existing elective course because we did not have a suitable habilitated course holder. There were no other obvious shortcomings.

Scope for improvements:

We see opportunities for further improvement in increased exchange of short-term visits of foreign lecturers, which is dependent on the program's financial capabilities.

Timetable for making improvements or eliminating weaknesses:

We will be looking for a new habilitated holder of an elective course this academic year. Due to the coronavirus pandemic in 2020/21, the number of guest speakers was limited, but we organised online seminars. We hope that the situation will allow for live guest lectures next year.

Karstology

Advantages:

Leading karst researchers, authors of numerous scientific articles, discussions, and monographs based on karstology, as well as a variety of applied karstology discussions, conduct the learning process in an international setting. If necessary, professors from foreign universities supplement the work. Every year, we enrol a manageable number of students so that we can maintain personal contact with them throughout their studies.

Shortcomings:

There are insufficient funds for lecturers, and there are no scholarships available for students from Slovenia or the developed world. However, we did not detect any shortcomings in the implementation of the curriculum.

Scope for improvements:

Following the establishment of a joint Slovenian-Chinese laboratory (Yunnan International Karst Environmental Laboratory) at Yunnan University (Kunming, China) in 2012 and the signing of a joint agreement in 2016, we intend to strengthen collaboration between the two faculties. We maintain regular contact with the University of China's management and are proceeding with the procedures for obtaining double degrees. This facilitates student and professor transfer and participation, and we hope to attract more students from this and neighbouring Asian countries. We are optimistic about the idea's future development following the visit of

the Slovenian Ambassador to Beijing to our Institute and the news that the University of Nova Gorica is on the list of the Chinese Ministry of Education.

Increasing the number of full-time teachers in the program.

Timetable for making improvements or eliminating weaknesses:

In 2020, the study program Karstology and the Ministry of Foreign Affairs of the Republic of Slovenia prepared and announced two Ad futura scholarships for citizens of recipient countries or beneficiaries of official development assistance (OECD DAC) within the Public Scholarship, Development, Disability, and Maintenance Fund of the Republic of Slovenia, covering all costs for the study of karstology and obtaining the title of Doctor of Science:

<https://www.srips-rs.si/vsi-razpisi/razpis/stipendije-za-izobrazevanje-tujih-drzavljanov-na-podlagi-razvojnih-dogovorov-v-letu-2020-306-jr>. The scholarship application period will last five years. Due to the global health situation (COVID-19), those interested have postponed enrolment until next year.

Humanities

Advantages:

Students have direct contact with professors. Because of the small number of students, the latter can devote a significant amount of time to each student (individual approach). Since 2019, we have had access to the MiTeam Platform, so lectures and discussions at the seminar can now take place remotely.

Shortcomings:

There are fewer opportunities for student exchange and group work due to the small number of students.

Scope for improvements:

Students from different years are encouraged to interact with one another. We encourage study exchanges, as well as participation in international conferences and research projects. We also occasionally offer joint lectures for students of various doctoral programs.

Timetable for making improvements or eliminating weaknesses:

In 2021/22, we will hold optional on-line meetings for senior students to present their research accomplishments and research dilemmas they face when writing a doctoral dissertation.

Cultural Heritage Studies

Advantages:

Based on the scientific research results and careers of our alumni, we can conclude that the program continues to provide a consistent and up-to-date methodological and

theoretical foundation, distinguished by a distinctly international design. In both the national and international educational contexts, the program remains a one-of-a-kind example of postgraduate education in the field of cultural heritage conservation, management, and planning.

Shortcomings:

We also used the 2020/21 academic year to jointly assess (colleagues, students, and alumni) the advantages and shortcomings of the study program. Limitations-shortcomings from the perspective of students: the amount of tuition fees, the length of studies (4 instead of 3 years), which represents an additional financial burden. All comparative doctoral studies abroad are limited to three years in duration, with tuition varying depending on whether the university is public or private. Furthermore, the majority of the advertised places for doctoral studies abroad offer (almost entirely) scholarships.

Limitations from the perspective of collaborators: the profession and research activity in architecture and construction differed greatly. As a result, the interest of new candidates is strongly academically/research-oriented and no longer combines professional practice experience with research work. As a result, there has been a decline in interest in pursuing a doctorate degree alongside regular employment; candidates are primarily interested in obtaining a research scholarship. The most significant limitation, according to students, alumni, and colleagues from other countries, is the promotion of studies and universities. It literally states "CHS is both locally and globally invisible".

Another shortcoming is that the majority of CHS students want an appealing university environment with housing and all additional support, which would also provide a more appealing broader study environment.

Scope for improvements:

Despite the fact that tuition fees will likely remain a constant limit, at least until the option of co-financing or financing scholarships becomes available, we believe that the main reason for the drop in enrolment is a lack of promotion of studies and universities to the appropriate audience. For years, we have observed that the vast majority of our students enrolled in CHS studies solely on the recommendation of previous alumni, professors, and collaborators. As a result, we intend to strengthen promotion of doctoral studies by making information on the UNG website more appealing and constantly updating it, to include alumni through online workshops and presentations of experiences and achievements for new candidates, and to strengthen cooperation with international organisations (universities and centres) where our former alumni are active or already employed.

Timetable for making improvements or eliminating weaknesses:

The final solution to the campus problem is regarded as a priority by students, associates, and alumni (impossible to define in terms of time)

Online meetings and workshops with alumni (from 2022/23)

Promotion of double degree for CHS and joint diploma ETCAEH (from 2021/22)

Promotion and greater visibility of all international mentors and experts who offer dissertation mentoring at CHS (from 2022/23)

Strengthening cooperation with universities in China, where our former alumni are already employed (by 2022/23)

Until 2023, a cooperation agreement with CPDI Africa (The Community Planning & Design Initiative Africa/ <https://www.cpdiafrica.org/about-us>)

Molecular Genetics and Biotechnology

Advantages:

Students can conduct research on the UNG campus, in biotechnology companies, other research institutions, or in the partner research institution ICGEB, which also provides staff support in the program's pedagogical implementation. The proportion of in-house lecturers who are more accessible to students has increased in recent years, which we consider to be a positive trend. Lecturers and mentors from internationally renowned universities and institutions impart additional knowledge and experience to students directly from their environment.

Shortcomings:

The number of mentors and scholarships available at UNG remains limited, though the situation is gradually improving. Insufficient funds for student scholarships.

Scope for improvements:

Improving collaboration among researchers from related laboratories at UNG and emphasizing interdisciplinary research. Even more home tutors with the resources to do research for home students. Continue to raise funds for student scholarships. We were quite successful in this in 2019/2020, but there was no scholarship (MR) available for potential students in 2020/2021. Acquisition of a research program in the field of Molecular Biology and Biomedicine.

Timetable for making improvements or eliminating weaknesses:

The director will encourage the program's lecturers to consider funding doctoral students through the ARRS 2021-22 tenders.

Cognitive Language Sciences

Advantages:

The program's staff structure continues to meet the requirements for quality education of doctoral students in Cognitive Language Sciences. The program includes a significant number of foreign top experts who carry out elective courses in the program. The program's advantage remains the close interaction of students with lecturers regarding the content and method of conducting student research work within the doctoral program.

Shortcomings:

A limited amount of scholarship opportunities remains for students who choose to study in the program.

Scope for improvements:

It is intended that in the future, doctoral students will be included in research project groups to a greater extent, providing additional opportunities for co-financing doctoral studies.

Timetable for making improvements or eliminating weaknesses:

In terms of improvements, they will be adapted to the timelines of future ARRS tenders for research projects as well as those of other domestic and foreign research funding agencies.

Materials

Advantages:

Interdisciplinary program with a wide range of courses with varying content.

Shortcomings:

There is a demand for additional study material in today's society. We have already added two new courses to the curriculum for the 2020/2021 academic year.

Scope for improvements:

We plan to add another course in the academic year 2021/2022.

Timetable for making improvements or eliminating weaknesses:

Academic year 2021/2022.

5. 4 SITUATIONAL ANALYSIS AND ORIENTATIONS 2019/2020

Environmental Sciences

Advantages:

As in previous years, it was possible to contact renowned professors and researchers in the field of the environment in Slovenia and abroad during the 2019/2020 school year. Part of the staffing needs was sensibly supplemented by foreign top experts in the field of the environment, who also lectured at the Science Evenings. This ensured a close connection with high-level international research activity. Individual relationships with lecturers and mentors also provide access to the necessary research infrastructure outside of UNG. Most students choose a series of lectures based on their research. Individual elective courses can include specialized lecturers who work individually with students, as allowed by the syllabus.

Shortcomings:

Only a few doctoral students choose to go on longer visits or work abroad, so the majority of the study takes place in Slovenia. This is especially noticeable among doctoral students, who are also young mothers, and for whom trips abroad pose not only an economic but also a social and organisational challenge. Mentors, who are not always UNG faculty members, also play an important motivating role in this, so the faculty has little influence on this except for recommendations.

Scope for improvements:

Above all, to encourage students to participate more actively and for longer periods in their education or research activities at foreign institutions.

Physics

Advantages:

Lecturers' occupations in the study program Physics are still appropriate in terms of professionalism and lecturer quality.

The high percentage of lecturers with experience from other research institutions continues to be an advantage of the Physics study program.

Shortcomings:

We did not notice any significant shortcomings in the current academic year.

Scope for improvements:

We see opportunities for further improvement in increased exchange of short-term visits of foreign lecturers, which is dependent on the program's financial capabilities. Due to the coronavirus pandemic, there were only a few guest speakers in 2019/20.

Karstology

Advantages:

Leading karst researchers, authors of numerous scientific articles, discussions, and monographs on karstology, as well as a variety of applied karstology discussions, lead the learning process in an international setting. If necessary, professors from foreign universities supplement the work. A manageable number of students so that we can maintain personal contact with them throughout their studies.

Shortcomings:

There is insufficient funding for lecturers, and there are no scholarship opportunities for students.

Scope for improvements:

Following the establishment of a joint Slovenian-Chinese laboratory (Yunnan International Karst Environmental Laboratory) at Yunnan University (Kunming, China) in 2012 and the signing of a joint agreement in 2016, we intend to strengthen collaboration between the two faculties. We maintain regular contact with the University of China's management and are proceeding with the procedures for

obtaining double degrees. This facilitates student and professor transfer and participation, and we hope to attract more students from this and neighbouring Asian countries. We are optimistic about the idea's future development following the visit of the Slovenian Ambassador to Beijing to our Institute. Increasing the number of full-time teachers in the program. We are in the process of reaching an agreement with the Ministry of Foreign Affairs to call two scholarships for the academic year 2021/2022.

Humanities

Advantages:

Students have direct contact with professors. Because of the small number of students, the latter can devote a significant amount of time to each student (individual approach). Since 2019, we have had access to the MiTeam Platform, so lectures and discussions at the seminar can now take place remotely.

Shortcomings:

There are fewer opportunities for student exchange and group work due to the small number of students.

Scope for improvements:

Students from different years are encouraged to interact with one another. We encourage study exchanges, as well as participation in international conferences and research projects. We also occasionally offer joint lectures for students of various doctoral programs.

Cultural Heritage Studies

Advantages:

The program's international design ensures a dynamic research environment and strong international visibility of pedagogical and research activities.

Shortcomings:

We were able to keep internal staff in 2019/20 thanks to the acquisition of EU research projects. Nonetheless, we are falling short of the planned increase in internal staff. We see the main reason as a lack of suitable scientific and research staff in both the narrower and broader national contexts, who could cover the necessary competencies for acquired projects' interdisciplinary areas.

Scope for improvements:

Increasing the national and international visibility of acquired projects, ensuring the appropriate attractiveness of the scientific research environment.

Molecular Genetics and Biotechnology

Advantages:

Students can conduct research on the UNG campus, in biotechnology companies, other research institutions, or in the partner research institution ICGEB, which also provides staff support in the program's pedagogical implementation. The proportion of in-house lecturers who are more accessible to students has increased in recent years, which we consider to be a positive trend. Lecturers and mentors from internationally renowned universities and institutions impart additional knowledge and experience to students directly from their environment.

Shortcomings:

The number of mentors and scholarships available at UNG remains limited, though the situation is gradually improving. Insufficient funds for student scholarships.

Scope for improvements:

Improving collaboration among researchers from related laboratories at UNG and emphasizing interdisciplinary research. Even more home tutors with the resources to do research for home students. Establishment of a tutoring system. Continue to raise funds for student scholarships. We were more successful in 2019/2020 than in previous years. We want to continue this trend.

Cognitive Language Sciences

Advantages:

Since the start of their studies, a large number of potential students from Slovenia and abroad have expressed interest in the program's interesting and well-balanced content, international faculty, and opportunities for close collaboration in research work. We consider this as a positive sign. Leading researchers in the field of cognitive language sciences are involved in the program, which helps to maintain a high standard of training in the doctoral program.

Shortcomings:

There are still far too few student scholarship opportunities. Part of the problem, we believe, stems from the fact that existing Slovenian foundations for student scholarships (for example, the Human Resources Fund) have a stronger preference for funding in the fields of science, medicine, and computer science, rather than interdisciplinary fields such as cognitive science, which intersects with science and traditional humanities fields.

Scope for improvements:

The amendment to the Decree on Norms and Standards for Determining Funds for Carrying Out Research Activities Financed from the Republic of Slovenia's Budget, adopted by the Republic of Slovenia's Government, was very welcome this academic year. The decree now states that in research programs or projects, it is permissible to

cover the difference in the cost of doctoral tuition fees that are not covered by other budgetary sources. This change expands funding opportunities for doctoral students while encouraging doctoral students to participate actively in research projects led by Centre for Cognitive Sciences staff. We are also looking for other ways to provide financial assistance to our students.

Materials

Advantages:

Interdisciplinary program with a wide range of courses with varying content.

Shortcomings:

There is a demand for additional study material in today's society.

Scope for improvements:

We will suggest additional elective courses.

5. 5 SITUATIONAL ANALYSIS AND ORIENTATIONS 2018/2019

Environmental Sciences

Advantages:

In 2018/2019, the study program's implementation staff was also able to contact renowned professors and researchers in the field of environment in Slovenia. Part of the staffing needs was sensibly supplemented by foreign top experts in this field, as well as through lectures at Science Evenings. This ensures close contact with high-level international research activity, and individual connections with lecturers provide indirect access to the necessary research infrastructure.

Shortcomings:

Only a few doctoral students choose to go on longer visits or work abroad, so the majority of the study still takes place in Slovenia. Mentors, who are not always UNG faculty members, also play an important motivating role in this, so the faculty has little influence on this except for recommendations.

Scope for improvements:

Above all, to encourage students to participate more actively and for longer periods in their education or research activities at foreign institutions.

Physics

Advantages:

Lecturers' occupations in the study program Physics are still appropriate in terms of professionalism and lecturer quality.

The high percentage of lecturers with experience from other research institutions continues to be an advantage of the Physics study program.

Shortcomings:

We did not notice any significant shortcomings in the current academic year.

Scope for improvements:

We see opportunities for further improvement in increased exchange of short-term visits of foreign lecturers, which is dependent on the program's financial capabilities.

Karstology

Advantages:

Leading karst researchers, authors of numerous scientific articles, discussions, and monographs on karstology, as well as a variety of applied karstology discussions, lead the learning process in an international setting. If necessary, professors from foreign universities supplement the work. A manageable number of students so we can maintain personal contact with them throughout their studies.

Shortcomings:

Insufficient funds for student scholarships.

Scope for improvements:

We established the Slovenian-Chinese Yunnan International Karst Environmental Laboratory at Yunnan University (Kunming, China) in 2012, and we signed a document on closer collaboration between the two faculties in April 2016. We continue to meet with the Chinese University's management on a regular basis and work on the procedures for obtaining double degrees. This facilitates student and professor transfer and participation, and we hope to attract more students from this and neighbouring Asian countries. Apply for as many (including international) tenders as possible. Increasing the number of full-time teachers in the program.

Humanities

Advantages:

Due to the small number of students, students have direct access to professors to whom they can devote a significant amount of time (individual approach). Since 2019, we have also had access to the MiTeam Platform, so lectures and discussions at the seminar can now take place remotely.

Shortcomings:

There are fewer opportunities for student exchange and group work due to the small number of students.

Scope for improvements:

Students from different years are encouraged to interact with one another. We encourage study exchanges, as well as participation in international conferences and research projects.

Cultural Heritage Studies

Advantages:

The program's distinctly international design ensures a dynamic research environment and strong international visibility of pedagogical and research activities.

Shortcomings:

In 2018/19, we were able to partially strengthen our internal staff thanks to the acquisition of EU research projects. Nonetheless, we recognize that we have not met all needs. We see the reason as a lack of suitable scientific and research staff in both the narrower and broader national contexts, who could cover the necessary competencies for acquired projects' interdisciplinary areas.

Scope for improvements:

Increasing the national and international visibility of acquired projects, ensuring the appropriate attractiveness of the scientific research environment. It would be very beneficial to offer a broader range of activities and services in collaboration with local actors, which would increase the area's attractiveness and visibility to potential researchers (construction of campus, strengthening the common identity of Nova Gorica with the university, city of science and culture, cross-border cooperation and provision of common services, etc.)

Molecular Genetics and Biotechnology

Advantages:

Students can conduct research on the UNG campus, in biotechnology companies, other research institutions, or in the partner research institution ICGEB, which also provides staff support in the program's pedagogical implementation. The proportion of in-house lecturers who are more accessible to students has increased in recent years, which we consider to be a positive trend. Lecturers and mentors from internationally renowned universities and institutions impart additional knowledge and experience to students directly from their environment.

Shortcomings:

Limited number of mentors and scholarships at UNG. Insufficient funds for student scholarships.

Scope for improvements:

Improving collaboration among researchers from related laboratories at UNG and emphasizing interdisciplinary research. Even more home tutors with the resources to

do research for home students. Establishment of a tutoring system. Continue to raise funds for student scholarships.

Cognitive Language Sciences

Advantages:

The study program's advantage remains its high flexibility in responding to the needs of the international research community in general and current trends in theoretical linguistics and the corresponding fields of cognitive sciences. Another advantage of the program's doctoral education is its versatility, with students receiving a diverse and balanced education in the field of contemporary theoretical and experimental linguistics.

Shortcomings:

There are still insufficient funds and scholarship opportunities for students.

Scope for improvements:

Associates are constantly looking for new alternative ways to fund scholarships for doctoral students.

6. STUDENTS AT THE FACULTY

Students are involved in the process of implementing and improving study programs through their representatives. UNG students also have two voting representatives in the UNG Senate. In the 2020/21 academic year, this function was performed by Katja Belec and Ana Prebil.

The UNG Student Council consists of Katja Belec and Ula Urbas (both Faculty of Environmental Sciences), Aleksandar Kuzmanovski (Faculty of Business and Technology), Nika Glavina and Anže Novak (both Faculty of Viticulture and Enology), Ana Prebil (Academy of Arts) and Matevž Rupnik and Matej Stanič (both Faculty of Natural Sciences). The representative of the Graduate School is Anja Polajnar. The president of the Student Council is Ana Prebil.

Student representatives are members of the senates of individual faculties. Katja Belec and Ana Prebil are student representatives in the UNG Senate, which also serves as the GS Senate.

6.1 STATISTICS OF STUDY ACTIVITY

The statistics of study activities by individual study programs implemented in the 2020/2021 academic year are presented below. A comparison is made between academic years in the last five years. The statistical indicators include the following elements:

- enrolment of students,
- enrolment in the 1st year,
- structure of 1st year students according to the type of completed secondary school,
- structure of 1st year students according to the method of graduating from high school,
- implementation of the study program,
- comparison of the movement of the number of students by study years and years,
- structure of students by gender,
- average exam grades of full-time and part-time study,
- analysis of advancement by year,
- duration and completion of the study program,
- average study duration of full-time students,
- average study duration of part-time students.

The presentation is given jointly for the entire GS and separately by individual third-level study programs: *Environmental Sciences, Physics, Karstology, Cultural Heritage Studies (formerly Economics and Techniques for the Conservation of the Architectural and Environmental Heritage), Humanities, Molecular Genetics and Biotechnology, Cognitive Language Sciences and Materials*. The data for third-level doctoral programs created as part of the Bologna renewal and representing a continuation of previous doctoral programs are organised into uniform tables.

Aggregated data on study performance

The data are for the academic year 2020/21 and are provided for individual postgraduate study programs at the Graduate School (as of 30. 10. 2021).

Types and number of study programs implemented by GS in the 2020/2021 academic year

Types of study programs	Yes/no	No. programs	Total number of enrolled students (all years are considered)
Bologna study programs			
3rd level study programs	yes	8	60

Comparison of the movement of enrolment in the first year and the total number of postgraduate students by years

Academic year	Study program	Enrolment in the 1st year	Total 1st year	Number of all students	Total
2016/2017	Physics (3rd level)	7	25	23	79
	Humanities (3rd level)	5		10	
	Cognitive Language Sciences (3rd level)	2		3	
	Karstology (3rd level)	0		8	
	Molecular Genetics (3rd level)	3		8	
	Environmental Sciences (3rd	2		17	
	Economics and technology...	6		10	
2017/2018	Physics (3rd level)	5	12	20	66
	Humanities (3rd level)	2		10	
	Cognitive Language Sciences (3rd level)	0		2	
	Karstology (3rd level)	2		6	
	Molecular Genetics (3rd level)	0		9	
	Environmental Sciences (3rd	3		13	
	Economics and technology ...	0		5	
2018/2019	Physics (3rd level)	5	13	17	55
	Humanities (3rd level)	2		9	
	Cognitive Language Sciences (3rd level)	0		2	
	Karstology (3rd level)	2		7	
	Molecular Genetics (3rd level)	0		7	
	Environmental Sciences (3rd	4		11	
	Economics and technology ...	0		2	
2019/2020	Physics (3rd level)	6	17	17	57
	Humanities (3rd level)	0		6	
	Cognitive Language Sciences (3rd level)	1		3	
	Karstology (3rd level)	2		6	

	Molecular Genetics (3rd level)	0		4	
	Environmental Sciences (3rd level)	3		9	
	Cultural Heritage Studies (3rd level)	2		4	
	Materials (3rd level)	3		8	
2020/2021	Physics (3rd level)	3	23	14	60
	Humanities (3rd level)	0		1	
	Cognitive Language Sciences (3rd level)	3		6	
	Karstology (3rd level)	1		6	
	Molecular Genetics (3rd level)	3		4	
	Environmental Sciences (3rd level)	2		9	
	Cultural Heritage Studies (3rd level)	3		5	
	Materials (3rd level)	8		15	
2021/2022	Physics (3rd level)	2	6	9	52
	Humanities (3rd level)	0		2	
	Cognitive Language Sciences (3rd level)	0		3	
	Karstology (3rd level)	1		6	
	Molecular Genetics (3rd level)	0		4	
	Environmental Sciences (3rd level)	2		8	
	Cultural Heritage Studies (3rd level)	0		4	
	Materials (3rd level)	1		16	

Proportion of foreign students in postgraduate study programs in the academic year 2021/2022

Study program	Number of all students	Number of foreign students	Proportion of foreign students
Third-level Physics	9	4	44.4
Third-level Humanities	2	0	0
Third-level Cognitive Language Sciences	3	2	66.7
Third-level Karstology	6	3	50.0
Third-level Molecular Genetics and Biotechnology	4	2	50.0
Third-level Environmental Sciences	8	4	50.0
Third-level Cultural Heritage Studies	4	3	75.0
Third-level Materials	16	6	37.5
Total	52	24	46.2

Analysis of enrolled students with special needs (students of all study programs are considered)

Academic year	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
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Indicator						
No. students with special needs	0	0	0	0	0	0

Average grade of studies:

Academic year	Study program	Average grade
2016/2017	Environmental Sciences 3	8.00
	Karstology 3	9.70
	Humanities 3	9.45
	Molecular Genetics... 3	9.30
	Economics and technology... 3	passed
	Physics 3	9.67
	Cognitive Language Sciences 3	9.36
2017/2018	Environmental Sciences 3	8.92
	Karstology 3	9.78
	Humanities 3	9.33
	Molecular Genetics... 3	9.24
	Economics and technology ... 3	passed
	Physics 3	9.42
	Cognitive Language Sciences 3	9.56
2018/2019	Environmental Sciences 3	9.17
	Karstology 3	9.43
	Humanities 3	9.75
	Molecular Genetics... 3	9.33
	Cultural Heritage Studies 3	passed
	Physics 3	9.53
	Cognitive Language Sciences 3	10.00
2019/2020	Environmental Sciences 3	8.60
	Karstology 3	9.65
	Humanities 3	8.83
	Molecular Genetics... 3	-
	Cultural Heritage Studies 3	passed
	Physics 3	9.83
	Cognitive Language Sciences 3	8.75
	Materials (3rd level)	9.95
2020/2021	Environmental Sciences 3	9.33
	Karstology 3	9.92
	Humanities 3	8.67
	Molecular Genetics... 3	9.00
	Cultural Heritage Studies 3	passed
	Physics 3	9.58

Cognitive Language Sciences 3	9.13
Materials (3rd level)	9.73

Completion and duration of studies:

Academic year 2020/2021	NO. DOCTORATES	AVERAGE LENGTH OF STUDIES in years
Environmental Sciences 3	1	5.25
Karstology 3	0	-
Humanities 3	1	6.48
Molecular Genetics... 3	0	-
Cultural Heritage Studies 3	0	-
Physics 3	6	4.69
Cognitive Language Sciences 3	1	4.33
Total	9	4.91

Data on study performance by programs:

Study program "Environmental Sciences (third level)"

Data on enrolment of students in the 1st year:

Academic Year	Tender	Enrolled	Limit
2016/2017	20	2	-
2017/2018	20	3	-
2018/2019	10	4	-
2019/2020	10	3	-
2020/2021	10	2	-
2021/2022	10	2	-

Pre-education data:

Academic Year	Study program			
	UNI	MAG*	MAG Level 2 *	Total
2016/2017		1	1	2
2017/2018	1		2	3
2018/2019			4	4
2019/2020	1		2	3
2020/2021			2	2
2021/2022			2	2

Enrolment in the 1st year according to the completed pre-education

Completed faculty	Number of students
Higher education institutions abroad	1
NTF, dept. for geology	1

Analysis of advancement between years

Academic year	Advancement from 1st to 2nd year (%)	Advancement from 2nd to 3rd year (%)	Advancement from 3rd to 4th year (%)	Advancement for the entire study program (%)
2016/2017	100.0	100.0	-	100.0
2017/2018	66.67	100.0	-	83.33
2018/2019	50.00	50.00	-	50.00
2019/2020	66.67	100.00	100.00	83.33
2020/2021	50.00	100.00	100.00	83.33

The pass rate is calculated as the ratio of students who have met the requirements for advancement to a higher year to the total number of students in the year. Only students who attended lectures and fulfilled at least one of the study obligations are considered for advancement in the first year (therefore fictitiously enrolled students who did not come to perform any study obligations in the academic year are omitted).

And the duration of the study

Academic year	Number of students		Proportion of repeaters		Advancement (proportion)		No. Doctoral students	Duration of studies in years		
	1st year	all years	1st year	all years	from 1st to 2nd year	all years		Average	min.	max.
2016/2017	3	17	1(33%)	1(6%)	100.0	100.0	3	4.9	4.6	5.3
2017/2018	3	13	0	0	66.67	83.33	4	4.60	3.75	5.75
2018/2019	4	11	0	0	50.00	0	4	5.02	4.33	5.75
2019/2020	3	9	0	0	66.67	83.33	2	4.67	4.25	5.08
2020/2021	2	9	0	0	50.00	83.33	1	5.25	5.25	5.25

Data on the number of students in individual courses and the average exam grades in 2020/2021:

Course	Average grade	No. Listeners
Selected Chapters in Water Pollution I	9.33	3
Research work III	passed	2
Research work I	passed	1
Research work II	passed	2
Research work IV	passed	1
Modern Trends in Environmental Sciences	passed	1
Total	9.33	10

Education (students of all study programs are considered)

Indicator	Academic year	2016/17	2017/18	2018/19	2019/20	2020/21
Average no. taking an individual exam per student		1	1	1	1	1
Average no. commission examinations in specific course		0	0	0	0	0
Average grade of passed exams		8.0	8.92	9.17	8.60	9.33

Number of doctorates in the postgraduate study program "Environmental Sciences"

Academic Year	No. Doctorates	Average length of study in years
2016/2017	3	4.9
2017/2018	4	4.60
2018/2019	4	5.02
2019/2020	2	4.67
2020/2021	1	5.25

Structure of students by gender

Academic Year	Males (%)	Females (%)
2016/2017	41.2	58.8
2017/2018	38.5	61.5
2018/2019	45.46	54.54
2019/2020	33.33	66.67
2020/2021	33.33	66.67
2021/2022	25.00	75.00

"Physics" study program

Data on enrolment of students in the 1st year:

Academic Year	Tender	Enrolled	Limit
2016/2017	20	7	-
2017/2018	20	5	-
2018/2019	15	5	-
2019/2020	10	6	-
2020/2021	10	3	-
2021/2022	10	2	-

Pre-education data:

Academic Year	Study program			Total
	UNI	MAG.	MAG Level 2*	
2016/2017	1	1	5	7
2017/2018			5	5
2018/2019	1		4	5

2019/2020			6	6
2020/2021			3	3
2021/2022			2	2

Enrolment in the 1st year according to the completed pre-education

Completed faculty	Number of students
Higher education institutions abroad	2

Analysis of advancement between years

Academic year	Advancement from 1st to 2nd year (%)	Advancement from 2nd to 3rd year (%)	Advancement from 3rd to 4th year (%)	Advancement for the entire study program (%)
2016/2017	71.4	100	-	81.8
2017/2018	100	100	-	100
2018/2019	20	100	-	60
2019/2020	83.33	100	100.00	91.67
2020/2021	66.67	100.00	0.00	77.78

The pass rate is calculated as the ratio of students who have met the requirements for advancement to a higher year to the total number of students in the year. Only students who attended lectures and fulfilled at least one of the study obligations are considered for advancement in the first year (therefore fictitiously enrolled students who did not come to perform any study obligations in the academic year are omitted).

Analysis of student advancement and duration of studies

Academic year	Number of students		Proportion of repeaters		Advancement (proportion)		No. Doctoral students	Duration of studies in years		
	1st year	all years	1st year	all years	from 1st to 2nd year	all years		Average	min.	max.
2016/2017	7	23	0	0	71.4	81.8	4	4.0	3.6	4.4
2017/2018	5	20	0	0	100	100	3	3.76	3.48	4
2018/2019	5	17	0	0	20	60	7	4.46	4.08	5.00
2019/2020	6	17	0	0	83.33	91.67	3	4.49	4.00	5.00
2020/2021	3	14	0	0	66.37	77.78	6	4.69	4.00	5.75

Data on the number of students in individual courses and the average exam grades in 2020/2021:

Course	Number of listeners	Average grade
Astroparticle physics	3	10
Contemporary particle physics	3	10
Selected Topics from Molecular Spectroscopy	2	10
Communication in science	2	10
* Laboratory of Scanning Electron Microscopy	2	10
Structural analysis of materials with x-ray absorption and emission spectroscopy and microscopy	2	9.5

Selected topics in nanoscience	2	9
Fundamentals of Free Electron Laser Operation	2	8.5
Introduction to discretization methods	2	8
Atmospheric Physics	1	10
High-Resolution Nuclear Magnetic Resonance	1	10
Crystallography	1	10
Modern experimental methods in astroparticle physics	1	10
Surface Science	1	10
Selected topics in biophysics	1	9
Research work I	2	passed
Research work II	5	passed
Research work IV	5	passed
Seminar	2	passed
Total	40	9.58

Education (students of all study programs are considered)

Indicator	Academic year				
	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021
Average no. taking an individual exam per student	1	1	1	1	1
Average no. commission examinations in specific course	0	0	0	0	0
Average grade of passed exams	9.67	9.42	9.53	9.83	9.58

Number of doctorates in the postgraduate study program "Physics"

Academic Year	No. Doctorates	Average length of study in years
2016/2017	4	4.0
2017/2018	3	3.76
2018/2019	7	4.46
2019/2020	3	4.49
2020/2021	6	4.69

Structure of students by gender

Academic Year	Males (%)	Females (%)
2016/2017	56.5	43.5
2017/2018	50.0	50.0
2018/2019	58.82	41.18
2019/2020	52.95	47.05
2020/2021	42.86	57.14
2021/2022	55.56	44.44

Study program "Karstology" (third level)

Data on enrolment of students in the 1st year:

Academic Year	Tender	Enrolled	Limit
2016/2017	15	0	-
2017/2018	15	2	-

2018/2019	15	2	-
2019/2020	10	2	-
2020/2021	10	1	-
2021/2022	10	1	-

Pre-education data:

Academic Year	Study program			Total
	UNI	MAG.	MAG Level 2	
2016/2017	0	0	0	0
2017/2018			2	2
2018/2019			2	2
2019/2020	1		1	2
2020/2021			1	1
2021/2022			1	1

Enrolment in the 1st year according to the completed pre-education

Completed faculty	Number of students
Higher education institutions abroad	1

Analysis of advancement between years

Academic year	Advancement from 1st to 2nd year (%)	Advancement from 2nd to 3rd year (%)	Advancement from 3rd to 4th year (%)	Advancement for the entire study program (%)
2016/2017	100.0	50.0	-	60.0
2017/2018	50.00	100.00	-	66.67
2018/2019	100.00	100.00	-	100.00
2019/2020	100.00	100.00	100.00	100.00
2020/2021	100.00	100.00	100.00	100.00

The pass rate is calculated as the ratio of students who have met the requirements for advancement to a higher year to the total number of students in the year. Only students who attended lectures and fulfilled at least one of the study obligations are considered for advancement in the first year (therefore fictitiously enrolled students who did not come to perform any study obligations in the academic year are omitted).

Analysis of student advancement and duration of studies

Academic year	Number of students		Proportion of repeaters		Advancement (proportion)		No. Doctoral students	Duration of studies in years		
	1st year	all years	1st year	all years	from 1st to 2nd year	all years		Average	min.	max.
2016/2017	1	8	1(100%)	1(13%)	100.0	60.0	2	6.7	6.1	7.3
2017/2018	2	7	0	0	50.00	66.67	2	5.41	4.41	6.41
2018/2019	2	7	0	0	100.0	100.0	4	5.91	4.33	7.00
2019/2020	2	6	0	0	100.0	100.0	1	10.41	10.41	10.41

2020/2021	1	6	0	0	100.00	100.00	1	0	0	0
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Data on the number of students in individual courses and the average exam grades in 2020/2021:

Course	Average grade	No. Listeners
Research methods and techniques in karst hydrology	10	2
Karst geology	10	1
Carbonate rocks	10	1
Measurements in karstology	10	1
Research methodology	10	1
Microbiology and geomicrobiology I	10	1
Shallow subterranean habitats	10	1
Karstification processes	10	1
Introduction to karstology	10	1
Tectonic structures and karstification	10	1
Active tectonics and karst	9	1
Independent research work 3	passed	2
Independent research work I	passed	1
Independent research work II	passed	2
Independent research work IV	passed	1
Seminar I	passed	1
Seminar II	passed	2
Total	9.92	21

Education

Indicator	Academic year	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021
Average no. taking an individual exam per student		1	1	1	1	1
Average no. commission examinations in specific course		0	0	0	0	0
Average grade of passed exams		9.70	9.78	9.43	9.65	9.92

Number of doctorates in postgraduate study program "Karstology (third level)"

Academic Year	No. Doctorates	Average length of study in years
2016/2017	2	6.7
2017/2018	2	5.41
2018/2019	4	5.91
2019/2020	1	10.41
2020/2021	0	-

Structure of students by gender

Academic Year	Males (%)	Females (%)
2016/2017	75.0	25.0
2017/2018	71.4	28.6
2018/2019	42.86	57.14
2019/2020	16.67	83.33

2020/2021	33.33	66.67
2021/2022	33.33	66.67

Study program "Third-level Humanities"

Data on enrolment of students in the 1st year:

Academic Year	Tender	Enrolled	Limit
2016/2017	20	5	-
2017/2018	20	2	-
2018/2019	10	2	-
2019/2020	10	0	-
2020/2021	10	0	-
2021/2022	10	0	-

Pre-education data:

Academic Year	Study program			
	UNI	MAG*	MAG Level 2 *	Total
2016/2017	1	1	3	5
2017/2018			2	2
2018/2019	1		1	2
2019/2020				0
2020/2021				0
2021/2022				0

Enrolment in the 1st year according to the completed pre-education

Completed faculty	Number of students

Analysis of advancement between years

Academic year	Advancement from 1st to 2nd year (%)	Advancement from 2nd to 3rd year (%)	Advancement from 3rd to 4th year (%)	Advancement for the entire study program (%)
2015/2016	80.0	50.0	-	71.43
2016/2017	100.0	50.0	-	77.8
2017/2018	50.0	100.0	-	85.71
2018/2019	50.0	0.0	-	33.33
2019/2020	-	0.0	-	0
2020/2021	-	100.00	-	100.00

The pass rate is calculated as the ratio of students who have met the requirements for advancement to a higher year to the total number of students in the year. Only students who attended lectures and fulfilled at least one

of the study obligations are considered for advancement in the first year (therefore fictitiously enrolled students who did not come to perform any study obligations in the academic year are omitted).

Analysis of student advancement and duration of studies

Academic year	Number of students		Proportion of repeaters		Advancement (proportion)		No. Doctoral students	Duration of studies in years		
	1st year	all years	1st year	all years	from 1st to 2nd year	all years		Average	min.	max.
2016/2017	5	10	0	0	100.0	77.8	2	5.6	4.1	7.1
2017/2018	2	10	0	0	50.0	85.71	1	5.16	5.16	5.16
2018/2019	2	9	0	11%	50.0	33.33	1	4.92	4.92	4.92
2019/2020	0	6	0	0	-	0	0	0	0	0
2020/2021	0	1	0	100.00	-	100.00	1	6.48	6.48	6.48

Data on the number of students in individual courses and the average exam grades in 2020/2021:

Course	Average grade	Number of listeners
Migration and creativity	10	1
Migration, borders and citizenship	8	1
Migration in discourses on population dynamics	8	1
Total	8.67	3

Education (students of all study programs are considered)

Indicator	Academic year	2016/17	2017/18	2018/19	2019/20	2020/21
Average no. taking an individual exam per student		1	1	1	1	1
Average no. commission examinations in specific course		0	0	0	0	0
Average grade of passed exams		9.45	9.33	9.75	8.83	8.67

Number of doctorates in the postgraduate study program "Humanities"

Academic Year	No. Doctorates	Average length of study in years
2016/2017	2	5.6
2017/2018	1	5.16
2018/2019	1	4.92
2019/2020	0	0
2020/2021	1	6.48

Structure of students by gender

Academic Year	Males (%)	Females (%)
2016/2017	30.0	70.0
2017/2018	10.0	90.0
2018/2019	0	100.0
2019/2020	0	100.0

2020/2021	0	100.0
2021/2022	0	100.00

Study program "Cultural Heritage Studies" (until 2018/2019 Economics and Techniques for the Conservation of the Architectural and Environmental Heritage)

Data on enrolment of students in the 1st year:

Academic Year	Tender	Enrolled	Limit
2016/2017	30	6	-
2017/2018	30	0	-
2018/2019	15	0	-
2019/2020	10	2	-
2020/2021	10	3	-
2021/2022	10	0	-

Pre-education data:

Academic Year	Study program			
	UNI	MAG*	MAG Level 2 *	Total
2016/2017	1	0	5	6
2017/2018				0
2018/2019				0
2019/2020			2	2
2020/2021			3	3
2021/2022				0

Enrolment in the 1st year according to the completed pre-education

Completed faculty	Number of students

Analysis of advancement between years

Academic year	Advancement from 1st to 2nd year (%)	Advancement from 2nd to 3rd year (%)	Advancement from 3rd to 4th year (%)	Advancement for the entire study program (%)
2016/2017	16.7	100.0	-	28.6
2017/2018	-	0	-	0
2018/2019	-	100	-	100
2019/2020	100.0	-	-	100.0
2020/2021	100.00	50.00	-	80.00

The pass rate is calculated as the ratio of students who have met the requirements for advancement to a higher year to the total number of students in the year. Only students who attended lectures and fulfilled at least one of the study obligations are considered for advancement in the first year (therefore fictitiously enrolled students who did not come to perform any study obligations in the academic year are omitted).

Analysis of student advancement and duration of studies

Academic year	Number of students		Proportion of repeaters		Advancement (proportion)		No. Masters Doctoral students	Duration of studies in years		
	<i>1st year</i>	<i>all years</i>	<i>1st year</i>	<i>all years</i>	<i>from 1st to 2nd year</i>	<i>all years</i>		<i>Average</i>	<i>min.</i>	<i>max.</i>
2016/2017	6	10	0	0	16.7	28.6	1	6.8	6.8	6.8
2017/2018	0	5	0	0	-	0	1	4.0	4.0	4.0
2018/2019	0	2	0	0	-	100	3	8.00	5.33	11.33
2019/2020	2	4	0	0	100.0	100.0	1	7.75	7.75	7.75
2020/2021	3	5	0	0	100.00	80.00	1M	1	1	1

* data are given for both groups and recorded with the letters M and D (M - master's students, D - doctoral students).

Data on the number of students in individual courses and the average exam grades in 2020/2021:

Course	Average grade	Number of listeners
Cultural heritage tourism: a territorial management perspective	passed	2
Economics of cultural heritage and creativity	passed	2
Economic valuation of culture: methods, management and policy	passed	2
Integrated project work	passed	2
Cultural heritage, common goods and the law	passed	2
Fundamentals of preservation of historic urban and cultural landscape	passed	2
Research work I	passed	2
Selected topics in sustainability of heritage: preservation, planning and management	passed	2
Research work II	passed	2
Contemporary trends in cultural heritage protection, planning and management	passed	2
Total	passed	20

Additional activities

-International Conference Our World Heritage (co-organised by UNG)

https://www.ourworldheritage.org/diversities_and_genders/

-Cultivating continuity of the European Landscape (UNISCAPE conference)

- Involved in the demonstration activities of the CLIC/HORIZON2020 and URBiNAT/HORIZON2020 projects

Education (students of all study programs are considered)

Indicator	Academic year	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021
Average no. taking an individual exam per student		1	1	1	1	1
Average no. commission examinations in specific course		0	0	0	0	0
Average grade of passed exams		passed	passed	passed	passed	passed

Number of second-level master's degrees in the postgraduate study program

Academic Year	No. Masters	Average length of study in years
2016/2017	1	4.3
2017/2018	0	
2018/2019	0	
2019/2020	1	6.41
2020/2021	0	-

Number of doctorates in the postgraduate study program "Economics and Techniques for the Conservation of the Architectural and Environmental Heritage"

Academic Year	No. Doctorates	Average length of study in years
2016/2017	1	6.8
2017/2018	1	4
2018/2019	3	8.00
2019/2020	1	7.75
2020/2021	1	1.00

Structure of students by gender

Academic Year	Males (%)	Females (%)
2016/2017	40.0	60.0
2017/2018	80.0	20.0
2018/2019	50.0	50.0
2019/2020	50.0	50.0
2020/2021	80.0	20.0
2021/2022	50.00	50.00

Study program "Molecular Genetics and Biotechnology"

Data on enrolment of students in the 1st year:

Academic Year	Tender	Enrolled	Limit
2016/2017	20	3	-
2017/2018	20	0	-
2018/2019	10	0	-
2019/2020	10	0	-
2020/2021	10	3	-
2021/2022	10	0	-

Pre-education data:

Academic Year	Study program			Total
	UNI	MAG*	MAG Level 2*	
2016/2017	1	0	2	3
2017/2018				0
2018/2019				0
2019/2020				0
2020/2021			3	3

2021/2022				0
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Enrolment in the 1st year according to the completed pre-education

Completed faculty	Number of students

Analysis of advancement between years

Academic year	Advancement from 1st to 2nd year (%)	Advancement from 2nd to 3rd year (%)	Advancement from 3rd to 4th year (%)*	Advancement for the entire study program (%)
2016/2017	100.0	100.0		100.0
2017/2018	-	100.0		100.0
2018/2019	-	-	100.0	100.0
2019/2020	-	-	-	-
2020/2021	100.00	100.00	-	100.00

The pass rate is calculated as the ratio of students who have met the requirements for advancement to a higher year to the total number of students in the year. Only students who attended lectures and fulfilled at least one of the study obligations are considered for advancement in the first year (therefore fictitiously enrolled students who did not come to perform any study obligations in the academic year are omitted).

* from the academic year 2019/2020 enrolment in the 4th year

Analysis of student advancement and duration of studies

Academic year	Number of students		Proportion of repeaters		Advancement (proportion)		No. Doctoral students	Duration of studies in years		
	1st year	all years	1st year	all years	from 1st to 2nd year	all years		Average	min.	max.
2016/2017	4	8	1(25%)	1(13%)	100.0	100.0	1	4.3	4.3	4.3
2017/2018	0	9	0	0	-	100.0	3	4.91	3.25	8.0
2018/2019	0	7	0	0	-	100.0	1	3.82	3.82	3.82
2019/2020	0	4	0	0	-	-	3	3.89	3.75	4.16
2020/2021	3	4	0	0	100.00	100.00	0	-	-	-

Data on the number of students in individual courses and the average exam grades in 2020/2021:

Course	Number of listeners	Average grade
Seminar I	2	9.00
Seminar II	2	9.00
Fundamentals of molecular biology and biotechnology	3	passed
Research work I	2	passed
Research work II	2	passed
Modern trends in molecular biology and biotechnology I	3	passed
Modern trends in molecular biology and biotechnology II	2	passed

Total	1	9.00
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Education (*students of all study programs are considered*)

Indicator	Academic year	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021
Average no. taking an individual exam per student		1	1	1	1	1
Average no. commission examinations in specific course		0	0	0	0	0
Average grade of passed exams		9.30	9.24	9.33	passed	9.00

Number of doctorates in the postgraduate study "Molecular Genetics and Biotechnology"

Academic Year	No. Doctorates	Average length of study in years
2016/2017	1	4.3
2017/2018	3	3.91
2018/2019	1	3.82
2019/2020	3	3.89
2020/2021	0	-

Structure of students by gender

Academic Year	Males (%)	Females (%)
2016/2017	50.0	50.0
2017/2018	44.4	55.6
2018/2019	42.86	57.14
2019/2020	50.0	50.0
2020/2021	50.0	50.0
2021/2022	25.00	75.00

Study program "Cognitive Language Sciences"

Data on enrolment of students in the 1st year:

Academic Year	Tender	Enrolled	Limit
2016/2017	20	2	-
2017/2018	20	0	-
2018/2019	10	0	-
2019/2020	10	1	-
2020/2021	10	3	-
2021/2022	10	0	-

Pre-education data:

Academic Year	Study program
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	UNI	MAG*	MAG Level 2*	Total
2016/2017	-	-	2	2
2017/2018				0
2018/2019				0
2019/2020	1			1
2020/2021		1	2	3
2021/2022				0

Enrolment in the 1st year according to the completed pre-education

Completed faculty	Number of students

Analysis of advancement between years

Academic year	Advancement from 1st to 2nd year (%)	Advancement from 2nd to 3rd year (%)	Advancement from 3rd to 4th year (%)	Advancement for the entire study program (%)
2016/2017	66.7	-		66.7
2017/2018	-	100.0		100.0
2018/2019	-	-		-
2019/2020	100.0	-	-	100.0
2020/2021	66.67	100.00	-	75.00

Analysis of student advancement and duration of studies

Academic year	Number of students		Proportion of repeaters		Advancement (proportion)		No. Doctoral students	Duration of studies in years		
	1st year	all years	1st year	all years	from 1st to 2nd year	all years		Average	min.	max.
2016/2017	3	3	1(33%)	1(33%)	66.7	66.7	0	0	0	0
2017/2018	0	2	0	0	-	100.0	0	0	0	0
2018/2019	0	2	0	0	-	-	0	0	0	0
2019/2020	1	3	0	33.33	100.0	100.0	0	0	0	0
2020/2021	3	6	0	0	66.67	75.00	1	4.33	4.33	4.33

Data on the number of students in individual courses and the average exam grades in 2020/2021:

Course	Number of listeners	Average grade
Research seminar: Contemporary trends in syntax II	3	10

Introduction to psycholinguistics	3	9
Introduction to cognitive sciences	2	10
Introduction to syntax	2	10
Introduction to semantics	2	9
Introduction to phonology	2	7.5
Seminar workshop I	1	10
Current trends in phonology I	1	6
Dissertation	1	passed
Research work I	2	passed
Research work II	1	passed
Total	20	9.13

Education (students of all study programs are considered)

Indicator	Academic year	2017/2018	2018/2019	2019/2020	2020/2021
Average no. taking an individual exam per student		1	1	1	1
Average no. commission examinations in specific course		0	0	0	0
Average grade of passed exams		9.56	10.00	8.75	9.13

Number of doctorates in the postgraduate study program "Cognitive Language Sciences"

Academic Year	No. Doctorates	Average length of study in years
2016/2017	0	
2017/2018	0	
2018/2019	0	
2019/2020	0	
2020/2021	1	4.33

Structure of students by gender

Academic Year	Males (%)	Females (%)
2016/2017	66.7	33.3
2017/2018	50.0	50.0
2018/2019	50.0	50.0
2019/2020	33.33	66.67
2020/2021	33.33	66.67
2021/2022	33.33	66.67

Study program "Materials"

Data on enrolment of students in the 1st year:

Academic Year	Tender	Enrolled	Limit
2019/2020	10	3*	-
2020/2021	10	8	-
2021/2022	10	1	-

*5 students enrolled

directly into the 2nd year

Pre-education data:

Academic Year	Study program			
	UNI	MAG*	MAG Level 2*	Total
2019/2020			3	3
2020/2021			8	8
2021/2022			1	1

Enrolment in the 1st year according to the completed pre-education

Completed faculty	Number of students
Higher education institutions abroad	1

Analysis of advancement between years

Academic year	Advancement from 1st to 2nd year (%)	Advancement from 2nd to 3rd year (%)	Advancement from 3rd to 4th year (%)	Advancement for the entire study program (%)
2019/2020	66.67	100.00	-	87.50
2020/2021	100.00	100.00	100.00	100.00

Analysis of student advancement and duration of studies

Academic year	Number of students		Proportion of repeaters		Advancement (proportion)		No. Doctoral students	Duration of studies in years		
	1st year	all years	1st year	all years	from 1st to 2nd year	all years		Average	min.	max.
2019/2020	3	8	0	0	66.67	87.50	-	-	-	-
2020/2021	8	15	0	0	100.00	100.00	-	-	-	-

Data on the number of students in individual courses and the average exam grades in 2020/2021:

Course	Number of listeners	Average grade
Multi-scale Materials Modelling and Engineering	5	10
Selected Topics from Molecular Spectroscopy	4	10
Communication in science	4	10
Materials as catalysts for hydrocarbon conversions	3	10
Materials for electrochemical devices	2	10
Transmission electron microscopy	2	10
Surface Science	2	10
Current topics in polymer science	2	9.5
High-Resolution Nuclear Magnetic Resonance	2	9
Solid state chemistry	2	8
Advanced functional materials	1	10

Research work I	8	passed
Research work II	2	passed
Research work III	5	passed
Seminar	8	passed
Total	52	9.73

Education (*students of all study programs are considered*)

Indicator	Academic year	2019/2020	2020/2010
Average no. taking an individual exam per student		1	1
Average no. commission examinations in specific course		0	0
Average grade of passed exams		9.95	9.73

Structure of students by gender

Academic Year	Males (%)	Females (%)
2019/2020	87.5	12.5
2020/2021	66.67	33.33
2021/2022	68.75	31.25

6. 2 OVERVIEW OF BIBLIOGRAPHICAL DATA OF POSTGRADUATE STUDENTS

The results of students' individual research work are shown in the table below, and they demonstrate their success in publishing results in scientific and professional literature as well as giving presentations at symposia and conferences. According to the COBISS bibliographic database, postgraduate students published 61 scientific and professional articles in the professional literature in 2020 and 2021, as well as 9 conference papers, 68 conference abstracts, and 13 other publications. This figure excludes publications by students who have recently completed their studies but are still publishing works related to their research in the form of doctoral and master's theses. Furthermore, the data excludes publications from students who are not managed in the COBISS system.

Review of postgraduate students' bibliographic data from the COBISS database for the years 2020 and 2021:

	Articles in scientific and professional journals	Fully published lectures at scientific and professional meetings	Published abstracts of papers at scientific and professional meetings	Other posts
	1.01, 1.02, 1.03, 1.04	1.06, 1.07, 1.08, 1.09, 1.10	1.12, 1.13	*
Physics				
851	0	0	0	0
847	0	0	0	0
845	0	0	0	0
824	0	0	2	0
829	0	0	0	0
825	0	0	0	0
826	0	0	0	0
827	2	0	0	1
819	0	0	0	0
799	1	0	0	0
801	1	0	3	0
796	3	0	0	0
795	1	0	0	0
797	17	0	0	0
Humanities				
815	0	0	0	0
Linguistics				
853	0	0	0	0
842	0	0	0	3
843	0	1	0	0
820	0	0	0	0
770	1	0	2	0
765	1	0	2	0
Karstology				
839	0	1	2	0
828	0	0	0	0

822	0	0	0	0
811	2	2	3	1
814	0	0	0	0
800	5	0	0	0
Molecular Genetics and Biotechnology				
849	0	0	0	0
844	0	0	0	0
859	0	0	0	0
754	0	0	0	0
Environmental Sciences				
838	0	0	0	0
852	0	0	0	0
823	1	0	2	0
836	1	0	1	4
808	4	0	1	0
809	1	0	1	0
805	2	0	0	0
757	0	0	0	0
768	6	1	1	0
Cultural Heritage Studies				
841	0	0	0	0
858	0	0	0	0
860	0	0	0	0
835	0	0	0	0
821	0	0	0	0
Materials				
848	1	0	3	0
840	0	0	0	0
857	2	0	0	0
855	0	0	7	0
854	0	0	2	3
846	1	2	3	0
850	0	0	3	0
856	0	0	6	0
837	4	0	3	0
834	1	2	8	0
818	0	0	0	0
813	2	0	9	0
832	0	0	1	1
812	0	0	0	0
817	1	0	3	0
Total	61	9	68	13

Note*

- 1.16-independent scientific composition or chapter in a monograph
- 1.17-independent professional composition or chapter in a monograph
- 1.18-password (composition in encyclopaedia, lexicon, dictionary...)
- 1.19-review, book review, critique
- 1.20-preface, foreword

- 2.01-scientific monograph
- 2.02-professional monograph
- 2.12- final report on research results
- 2.13-works, study, pre-study
- 2.14-project documentation
- 2.16 -artistic works
- 2.13-works, study, pre-study
- 2.14-project documentation
- 2.16 -artistic works

6. 3 MOBILITY OF STUDENTS AND LECTURERS

The University of Nova Gorica provides various types of mobility. Because of the Covid-19 epidemic crisis, mobility was severely restricted during the 2020/21 academic year. The following is a list of realized mobility of students and lecturers from the Graduate School:

I. Incoming student mobility for study:

- four students from the University of Oldenburg, Germany

II. Ceepus:

Incoming student mobility for study:

- one student from the University of Belgrade, Serbia

In the 2020/2021 academic year, the Graduate School had concluded the following Erasmus + interinstitutional agreements between the program countries within the University of Nova Gorica:

Austria

- The University of Graz
- Universität Wien (staff only)

Bulgaria

- Bulgarian Academy of Sciences
- Sofia University "St. Kliment Ohridski"

Czech Republic

- Masaryk University
- Silesian University in Opava
- University of Pardubice

Denmark

- Roskilde University

Estonia

- Tallinn University

France

- École Centrale Paris

Greece

- University of Patras

Croatia

- University of Rijeka

- University of Zagreb, Faculty of Chemical Engineering and Technology
- University of Zagreb, Faculty of Food Technology and Biotechnology

Italy

- University of Padua
- University of Salerno
- University of Udine
- University of Milan
- Ca'Foscari University of Venice

Latvia

- University of Latvia

Hungary

- Eötvös Loránd University

Macedonia

- Ss. Cyril and Methodius University in Skopje

Germany

- Goethe University
- Ludwig Maximilian University of Munich (staff only)
- University of Oldenburg

Netherlands

- Tilburg University

Norway

- University of Tromsø – The Arctic University of Norway
- Hedmark University College

Portugal

- University of Trás-os-Montes and Alto Douro

Poland

- Polish Academy of Science

Romania

- University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca
- Transylvania University of Braşov

Serbia

- University of Niš
- University of Novi Sad
- University of Belgrade

Turkey

- Ankara University
- Mustafa Kemal University
- Bolu Abant İzzet Baysal University

and the following Erasmus + interinstitutional agreements between program and partner countries:

Armenia

- Yerevan State University

Azerbaijan

- Azerbaijan State Agricultural University (ADAU)
- Mingachevir State University

Belarus

- Belarusian-Russian University

India

- Swami Ramanand Teerth Marathwada University

South Africa

- University of Cape Town

China

- Southwest University of Science and Technology

Kenya

- Kenyatta University

Korea

- Sogang University

Pakistan

- Abdul Wali Khan University Mardan

- University of Peshawar

Russia

- Dubna State University

- Lomonosov Moscow State University

- North Caucasus Federal University

Serbia

- University of Belgrade

- University of Niš

Thailand

- Chiang Mai University

Ukraine

- O.M. Beketov National University of Urban Economy in Kharkiv

- Vasyl Stefanyk Precarpathian National University

Venezuela

- Instituto Venezolano de Investigaciones Científicas (IVIC)

United States of America

- New York University

- University of California San Diego

Outbound mobility of our students to foreign universities and institutes**Environmental Sciences**

Due to the Covid-19 epidemic, there was no outbound mobility of our students at foreign universities and institutes.

Physics

- 1 student visited Niels Bohr International academy, Denmark, as part of the STSM project,
- As part of their research work, 1 student took measurements with the CTA-N Raman Leader at the Roque de los Muchachos Observatory, Spain.

Karstology

During the previous academic year, Karstology students conducted various research projects and only to a limited extent actively participated in international and domestic professional and scientific meetings.

- One student did research work in Croatia,
- one student did research work in Iran,
- one student did research work in Serbia,
- one student did research work in Cuba,
- one student did research work in Brazil,
- one student did research work in Lebanon,
- one student did research work in China,
- one student attended the International PhD Academy Global Challenges Initiatives Plastic Pollution and Bioplastic Materials, Venice, Italy,
- one student attended Summer School "IGSS 2021 - Geochronology Summer School 2021", Morteratsch, Switzerland.

Humanities

Humanities students published scientific articles in internationally recognized, peer-reviewed journals during the 2020/2021 academic year, e.g., *Contributions to recent history*, *Two homelands*, *Annales* and attended international conferences, International conference of the Estonian Association of Comparative Literature. One student edited *Dolenčev zbornik 2021*.

Cultural Heritage Studies

Also in 2020/21, students conducted research through established collaborations with partner institutions (particularly Iuav University), research projects offered by international course holders and mentors, and research projects carried out within their studies: Horizon2020 CLIC / *Circular models Leveraging Investments in Cultural heritage adaptive reuse*, H2020 URBiNAT/ *Healthy corridors as drivers of social housing neighbourhoods for the co-creation of social, environmental and marketable NBS*.

One student was involved in the following seminars/ workshops:

- Landscape and the New Mobility Paradigm by Margherita Cisani (Università degli Studi di Padova) Respondent: Theano S. Terkenli (University of the Aegean)
- Creating a Digital Cultural Heritage Community, Professor Sarah Whatley, Director of the Centre for Dance Research (C-DaRE) at Coventry University, UK.
- The archaeology and history of Greek and Roman art- Department: L-ANT/07, University of Rome, October, 2020
- New Cultural Heritage Management course to introduce professionals to Australian good practice May, 2021, Australian National University

One student was involved in a seminar/workshop/advanced training.

- UNISCAPE online Lecture Series, Where Disciplines Meet - The Architects' sense for the landscape, September 14, 2021.
- UNISCAPE online Lecture Series, Where Disciplines Meet - Landscape based Eco museum, June 1, 2021.
- UNISCAPE online Lecture Series, Where Disciplines Meet - Agroforestry, energy plantations and landscape management, May 4, 2021.
- UNISCAPE online Lecture Series, Where Disciplines Meet - Landscape and the New Mobility Paradigm, March 2, 2021.
- UNISCAPE online Lecture Series, Where Disciplines Meet - Landscape as a common good, February 2, 2021
- UNISCAPE online Lecture Series, Where Disciplines Meet - Europe, the continent of cheeses. For how long? January 12, 2021.

Molecular Genetics and Biotechnology

- One student attended the 18th Hellenic Symposium on Medicinal Chemistry, 25-27. 2. 2021 (on-line)
- Students were involved in research work at ICGEB (The International Centre for Genetic Engineering and Biotechnology) research centres.

Cognitive Language Sciences

- One student presented their research work at the annual international conference ConfIBL-2021 at the Institute of Bulgarian Language of the Bulgarian Academy of Sciences, Sofia, Bulgaria, 14. 5. 2021.
- One student attended the international conference "LCAD Linearizing Constituents Across Domains 2020", 15. - 16. 10. 2020 (online).
- One student attended the Winter Linguistic Seminar at the Institute of Bulgarian Language of the Bulgarian Academy of Sciences (online), 28. 1. 2021 and 11. 2. 2021.
- One student attended an international conference "34th Annual CUNY Conference on Human Sentence Processing (CUNY 2021)", University of Pennsylvania (USA), online, 4. - 6. 3. 2021.
- One student attended the international workshop "PC-IBEX Satellite Workshop", University of Pennsylvania (USA), online, 3. 3. 2021.
- Two students attended the international workshop "Theme Vowels in V (P) structure and beyond (ThV 2021)", University of Graz (Austria), online, 23. 4. 2021.
- One student presented her research work at StuTS Student Linguistics Conference in Berlin (Germany), online, 19. - 24.11. 2020.
- One student presented her research work at the research seminar "Empirical approaches to linguistic variation: The Balkans and beyond", University of Zurich (Switzerland), online, 11. - 12. 3. 2021.

- One student attended the annual international summer school "New York-St. Petersburg Institute of Linguistics, Cognition and Culture: NYI 20 Summer School", online, 15. - 30. 7. 2021.
- Two students attended the Eastern Generative Grammar (EGG) Summer School, online, 26. 7 - 5. 8. 2021.
- One student attended the international winter school "LOT Winter School", University of Amsterdam (Netherlands), online, 11. - 22. 1. 2021.
- One student attended the international conference "Internationalisms in Slavic as a window into the architecture of grammar", University of Graz (Austria), 24-26. 2. 2021.
- One student attended the annual international conference "FASL 30: Formal Approaches to Slavic Linguistics", Massachusetts Institute of Technology (USA), online, 13. - 16. 5. 2021.
- One student attended the 16th Annual International Conference "Slavic Linguistic Society", University of Illinois-Urbana-Champaign (USA), online, 3. -5. 9. 2021.

Materials

In the 2020/2021 academic year, which was also affected by the Covid-19 epidemic, there was no student mobility.

Involvement of students from other universities and international exchanges

Environmental Sciences

In the 2019/2020 academic year, no guest students were included in the Environmental Sciences program.

Physics

In the 2020/2021 academic year, no guest students were included in the Physics program.

Karstology

In the 2020/2021 academic year, several students from abroad were included in the program, namely from China, Iran, Croatia, Serbia, France, Lebanon and Brazil.

Humanities

In the 2020/2021 academic year, no guest students were included in the program.

Cultural Heritage Studies

Students from other universities are typically involved in the framework of joint mentoring agreements, as well as joint international workshops and cooperation agreements. We did not have guest students in 20/21.

Molecular Genetics and Biotechnology

In 2020/2021, one student from the University of Belgrade was included in the research work within the program.

Cognitive Language Sciences

In the 2020/21 academic year, no guest students were included in the program.

Materials

In the 2020/2021 academic year, no guest students were included in the Materials program.

Visiting lecturers at foreign universities and institutes

Environmental Sciences

Due to the situation related to the Covid-19 epidemic, lecturers' visits to foreign universities and institutes were halted in the 2020/2021 academic year.

Physics

Due to the situation regarding security measures due to the spread of coronavirus, lecturers' visits to foreign universities and institutes were limited in the 2020/2021 academic year:

Matjaž Valant

- invited lecture "3rd International Conference Technologies and Business Models for Circular Economy - Power-to-solid solution for high efficiency seasonal grid energy storage, Maribor, December 2020.

Gabrijela Zaharijas

- invited online lecture "News from > TeV gamma-ray sky" at the TAUP Conference, Valencia, 30. 8. - 3. 9. 2021.
- invited online lecture "Gamma-ray dark matter searches" at ISAPP School, Madrid, "Gamma rays to shed light on dark matter", 21. - 30. 6. 2021.
- invited online lecture "Dark matter searches with gamma rays from space and the ground" at the International Symposium of JSPS Core-to-Core program "DMNet", 24. - 25. 3. 2021.
- working visit to the University of Turin, Italy, 1. - 3. 9. 2021.

Iztok Arčon

- invited lecture "X-ray absorption spectroscopy analysis: in situ, operando, in vivo" on 26th Slovenian Chemical Days, Portorož, 16. - 18. 9. 2021
- invited lecture "Monitoring of chemical processes at the atomic level by operando X-ray absorption spectrometry", Week of the Institute of Chemistry, Ljubljana 31. 5. - 4. 6. 2021
- online invited lecture "Academic career route" at the Early Career Scientists Symposium, Oxford, UK, 29. 10. 2020
- online lecture "In-situ Fe K-edge XAS analysis of ionic species in the highly concentrated FeCl₂ (aq) solution for energy storage technology" European XFEL Users' Meeting 2021, 27. 1. 2021

Karstology

Our international work was halted this year due to the epidemiological situation. Nonetheless, we delivered some lectures online, including one live.

Martin Knez

- Classical Karst (Karst) - Its principal characteristics and geology, Slovenia, Seminar on China-ASEAN Karst Geology Comparison and Mapping, Guilin, China, 21. 5. 2021
- Geology and principal characteristics of the Classical Karst, 1st International webinar on karst and caves, PUC Minas University, Belo Horizonte, Brazil, (online), 13. 8. 2021

Janez Mulec

- Microbiota in the underground and human impact, 1st International webinar on karst and caves, PUC Minas University, Belo Horizonte, Brazil (online), 14. 4. 2021

Tanja Pipan

- Shallow subterranean habitats: patterns and processes: BIO280, Cave Ecology, Centre College, USA, (online), 15. 1. 2021

Nataša Ravbar

- Surface-groundwater interactions in karst: overview, concept and mapping, European Geosciences Union, EGU General Assembly 2021, (online), 29. 4. 2021
- Infiltration processes in karst aquifers affected by large-scale forest disturbances, European Geosciences Union, EGU General Assembly 2021, (online), 29. 4. 2021

Tadej Slabe

- Karstology in the Classical Karst, 1st International webinar on karst and caves, PUC Minas University, Belo Horizonte, Brazil, (online), 17. 9. 2021

Stanko Šebel

- Potential near fault observatory site in Slovenia: overview of the area south of Postojna, General Assembly of the European Seismological Commission, ESC 2021, (online), 19. 9. 2021

Nadja Zupan Hajna

- Karst, caves, and people, Virtual opening of the International Year of Caves and Karst, organisation of the opening of the International Union of Speleology - UIS, (online), 26. 1. 2021
- Cromerian in Cave sequence, INQUA-SEQS, Meetings on Middle Pleistocene Stratigraphy, (online), 14. 5. 2021

- A World of Karst, Caves and People, Celebration of the UIS International Year of Caves and Karst 2021: UNESCO Protected Areas and UN Agenda 2030, UNESCO World Heritage Centre, Paris, France, 13. 9. 2021
- A World of Karst, Caves and People, Karst Preservation and Sustainable Tourism Development, University of Zadar, Croatia, (online), 24. 9. 2021

Humanities

Due to the Covid-19 epidemic, there were significantly fewer lectures at foreign universities in the 2020/21 academic year.

- TOROŠ, Ana. "O dolce terra" by Alojz Gradnik: lecture at the University of Udine, 26. 4. 2021 (via ZOOM)

Cultural Heritage Studies

The study program's lecturers are mostly habilitated and regularly employed at foreign universities, and they frequently visit international university institutions as lecturers.

Saša Dobričić

- Development abroad (online): *Introduction to Conserving Modern Architecture*, Course completion, Getty Conservation Institute, September 2021
- DOBRIČIĆ S., *CLaD meets UNISCAPE: Is the landscape model mature enough to face the world's global challenges?*, online public lecture, Centre for Landscape Democracy (CLaD), Norwegian University of Life Sciences (NMBU), 2. 9. 2021
- DOBRIČIĆ S., *Presentation of the strategic guidelines for the development of the heritage sciences*, Third consultation of the SASA (Slovenian Academy of Sciences and Arts), 27. 7. 2021
- DOBRIČIĆ S., *Introductory presentation: Research challenges at Cultivating the Continuity of the European Landscape: new challenges, innovative perspectives*, international conference on the occasion of the 20th anniversary of the ELC, organised by Uniscape, Florence, 16. - 17. 10. 2021

Marco Acri

- Workshop holder and lecturer: Workshop on Projects for *Inventing, Preserving and Disseminating Innovative Traditional Knowledge*, Second cycle degree program in International Cooperation on Human Rights and Intercultural Heritage, University of Bologna, Italy, September 2021.
- Presentation: Acri M., Biasi A., *Reflections on reuse of the abandoned Gorizia sanatorium (1933)*, 29.08.2021, DOCOMOMO International Conference, (online) Tokyo, August 2021
- Public lecture. 29.07.2021, *Le trasformazioni recenti e le tendenze nel campo dell'economia del patrimonio culturale*, Lecture for CONFORM and Regione Veneto within the CHANCES Project, July 2021

- Webinar lecture: The sustainability of nature-based solutions and solidarity economy, *Title of presentation based on the UNG Project CLIC. Merging urban landscape regeneration and circular economy; lecture for Centre for Social Studies of Coimbra*, 7. 7. 2021
- Lecture: OurWorldHeritage initiative, Organiser final conference of the session on Diversities and genders and Session moderator in Final Conference 29. - 30. 3. 2021, https://ourworldheritage.org/diversities_and_genders/
- Hosting: March 2021 - October 2021 Visiting Fellow University of Padua, 3D Card project.

Molecular Genetics and Biotechnology

Lecturers from the study program *Molecular genetics and biotechnology* who are habilitated and employed at foreign universities make frequent visits to major international university institutions as lecturers.

Due to the Covid-19 pandemic, lecturers' visits to foreign universities and institutes were severely restricted in the 2021/21 academic year.

Cognitive Language Sciences

In the academic year 2020/21, domestic lecturers of the study program Cognitive Language Sciences were involved in the following activities abroad:

Franc Marušič

- "Flogging a dead horse or tweaking the relevant details. Agreement in Multivaluation Constructions": online lecture at AMC 2021. Frankfurt am Main, Germany. 19. 5. 2021.
- Invited lecture (online): "Number morphology as a source of early mathematical content". Kherson State University, Ukraine. 22. 10. 2020.
- Invited lecture (online): "The interplay of grammatical number and the numeral system in early language acquisition", Incontri di linguistica Slava, University of Udine (Italy), 26.11.2020. (together with R. Žaucer)
- Invited lecture (online): "I can easily see how this came about': Cyclical language change in Slovenian expression of modality", Incontri di linguistica Slava, University of Udine (Italy), 19.11. 2020. (together with R. Žaucer).
- "Switch Agreement in South Slavic: Experimental study.", Online lecture at the international conference Slavic Linguistic Society - SLS 16, University of Illinois, Urbana-Champaign. 3. 9. 2021 (together with B. Ristić, J. Willer-Gold, B. Arsenijević, N. Čordalija, N. Leko, F. Malenica, T. Miličev, N. Miličević, P. Mišmaš, I. Masnikosa, I. Mitić, A. Peti-Stantić, B. Stanković, J. Tušek and Andrew Nevins).

Penka Stateva

- "Ezиков transfer v oblastta na pragmatikata/ Language transfer in the domain of pragmatics": invited lecture (online) at the Institute of Bulgarian Language, Sofia, Bulgaria, 28. 1. 2021.

- "Developmental aspects of maximize presupposition: a view from Slovenian": invited lecture (online) at the Department of Linguistics, University of Geneva, 27. 4. 2021.
- "Beyond agreement: how syntactic features are assigned in real time", online lecture at the annual international conference at the Institute of Bulgarian Language, Sofia, Bulgaria, 14. 5. 2021. (together with D. Khristov, J. Franck, and A. Stepanov)
- "The anti-duality inference: implications for cross-linguistic variation and L2 acquisition.", online lecture at the International Conference on Multilingualism (COM) 2021, University of Constance, 23. 6. 2021 (with Ali Al Moussaoui)
- "The anti-duality inference: implications for cross-linguistic variation and L2 acquisition", online lecture at the international conference XPRAG.it 2020 (2021), University of Turin, 9. 7. 2021 (with Ali Al Moussaoui)
- "Developmental aspects of Maximize Presupposition: a view from Slovenian.": Invited lecture at an international conference *Slavic Linguistics Society 16*. Urbana: University of Illinois Board of Trustees, 4. 9. 2021.

Artur Stepanov

- "Measuring free word order: some empirical and modelling perspectives": invited lecture at the Institute of Bulgarian Language, Sofia, Bulgaria, 28. 1. 2021.
- "The nominal structure of clausal complements: an experimental study of wh-extraction in Bulgarian", lecture at the annual international conference at the Institute of Bulgarian Language, Sofia, Bulgaria, 14. 5. 2021 (together with I. Krapova)
- "Beyond agreement: how syntactic features are assigned in real time", lecture at the annual international conference at the Institute of Bulgarian Language, Sofia, Bulgaria, 14. 5. 2021 (together with D. Khristov, J. Franck, and P. Stateva)
- "The time course of processing cataphora in a pro-drop language: the case of Slovenian.", Lecture at the international conference Formal Description of Slavic Languages FDSL-14, University of Leipzig, 4. 6. 2021 (together with M. Pavlič)
- "Prosodic marking in Russian multiple wh-questions: a sentence production study", poster at the 4th International Conference Phonetics and Phonology in Europe (PAPE), University of Barcelona. 23. 6. 2021 (with P. Duryagin)

Rok Žaucer

- Invited lecture: "The interplay of grammatical number and the numeral system in early language acquisition", *Incontri di linguistica Slava*, online, University of Udine (Italy), 26. 11. 2020 (together with F. Marušič)
- Invited lecture (online): "I can easily see how this came about': Cyclical language change in Slovenian expression of modality", *Incontri di linguistica Slava*, University of Udine (Italy), 19. 11. 2020 (together with F. Marušič)

Materials

Prof. dr. Blaž Likozar

- Engineering catalytic conversion pathways of lignocellulose to functional alcohol or carboxylic monomers. *Polymer Meeting 14*, Graz University of Technology, 30. 8. – 2. 9. 2021.
- How can multi-scale modelling simulations help catalysis and engineering? *EFCATS Summer School*, Slovenian Chemical Society, Portorož, 15 - 19. 9. 2021
- How can (multi-scale) modelling, simulations and engineering help biorefining?. XIII. Meeting of young chemical engineers, Croatian Society of Chemical Engineers, Zagreb, 20. - 21. 2020.

Prof. dr. Nataša Novak Tušar

- New insights into the synthesis of Fenton-like AOP catalysts for wastewater treatment. *The 5th International Conference on New Photocatalytic Materials for Environment, Energy and Sustainability (NPM-5) [and] the 6th International Conference on Photocatalytic and Advanced Oxidation Technologies for the Treatment of Water, Air, Soil and Surfaces (PAOT-6): Virtual conference*, Szeged: University of Szeged, 24. - 27. 5. 2021.

Prof. dr. Nejc Hodnik

- Nano (electro) catalysts design and advanced electrochemical characterization. *Slovenian Chemical Days 2020 = 26th Annual Meeting of the Slovenian Chemical Society*, Slovenian Chemical Society, Portorož, 16.- 18. 9. 2020.

Doc. dr. Ivan Jerman

- Development of temperature and PH responsive protective textile coatings with various proactive antimicrobial working mechanisms. *4th International Conference on Science & Engineering of Materials*, 19. - 22. 2021.

Doc. dr. Petar Djinović

- Photocatalytic CO₂CO₂ and CH₄CH₄ conversion to H₂H₂ and CO beyond thermodynamic equilibrium for a possible power to gas application. *Enerstock 2021: 15th International Virtual Conference on Energy Storage*, 9 - 11 2021, Ljubljana.

Doc. dr. Miha Grilc

- *Catalytic valorisation of lignocellulosic biomass: lecture at the Institute of Marine Biology, University of Montenegro*, 30. 8. 2021.

6.4 AWARDS AND ACHIEVEMENTS OF STUDENTS AND GRADUATES

Vesna Plesničar, a postgraduate student in the Cognitive Language Science program, has been awarded the Škrabec Scholarship for 2021, which is awarded to outstanding undergraduate and postgraduate students in Slovene, Slavic, Classical Philology, and General and Comparative Linguistics by the Škrabec Foundation.

6.5 MONITORING THE EMPLOYABILITY OF GRADUATES

A special emphasis is placed on monitoring graduates' employability and gathering feedback from graduates on the relevance of acquired knowledge in the labour market. Because the goal of all UNG study programs is to achieve and maintain high employability, the Career Centre assists graduates in finding their first job.

Students in postgraduate programs at the Graduate School are typically employed as young researchers at UNG or in the economic environment during their studies. So far, data show that the majority of them are employed after graduation. Some continue to work in research institutions, such as UNG, while others remain or gain employment in the economy. At the university level, graduates' overall employability averages 86.64% after six months and 95.02% after twelve months. After six months, employment in the profession is 75.12% at the university level and 80.60% after twelve months.

The employability rate of doctoral students is slightly higher than the average of the entire University, at 87.04% after six months and 96% after twelve months. Employability in the profession is equal to general employability, with 87.04% after six months and 96% after twelve months.

Data on employability are dated November 2021 and cover graduates from 2017 onwards.

6.6 ALUMNI CLUB OF THE UNIVERSITY OF NOVA GORICA

The Alumni Club, which unites graduates, master's, and doctoral students from all UNG study programs, was founded in 2004. In 2011, UNG hired one person to professionally manage the UNG Alumni Club's activities. It will be possible to effectively obtain feedback on the employability of graduates and the relevance of the knowledge they have acquired in UNG study programs through the members of the club. More information about the Alumni Club's activities can be found in the UNG Self-Evaluation Report for 2020 and 2021.

6. 7 ANALYSIS OF STUDENT SURVEYS

Student surveys are used to evaluate pedagogical work in all GS programs on a regular basis. The following four thematic surveys are used to collect students' opinions on the quality of the program's content and implementation:

- Student survey to assess the quality of lectures of individual lecturers,
 - Student survey for assessing the quality of lectures of individual lecturers,
- Student workload survey,
 - Study program evaluation survey.

The surveys are completely anonymous. We switched to an entirely electronic method of completing, collecting, and analysing surveys in the 2013/14 academic year. We hope to improve data collection efficiency and automate analysis by using electronic surveys. We completed the renovation of student surveys this academic year. In this way, we hope to bring surveys closer to students and encourage them to complete them more thoroughly. The Faculty's Self-Evaluation Report, which is publicly published and thus accessible to all students, UNG associates, and other stakeholders, includes analyses of all surveys. The results of individual student surveys to assess the quality of lectures are not publicly available. The results of these surveys are presented anonymously in the self-evaluation report, so that only the average grades of all lecturers and assistants are shown, without mentioning names.

We collect student opinions on the quality of pedagogical work in individual courses on a regular basis through *Student Surveys to assess the quality of lectures*. Two versions of student surveys have been developed for this purpose: one is designed to assess the quality of pedagogical work of lecturers who teach the course in the form of regular lectures, and the other is used when the lecturer conducts the course in the form of individual consultations (when less than five students enrol in the course). Students evaluate the pedagogical work of each lecturer and assistant at the end of the lectures before the exam period. The analysis is performed automatically. The revised surveys are significantly shorter than the previous ones, but they still cover all of the essential course implementation characteristics, including modern approaches to teaching.

The individual survey results are not made public; only the school administration has access to them. Every lecturer has the right and obligation to view the survey results pertaining to their work. This data provides feedback to lecturers on their work. They draw attention to the weaknesses and strengths of the pedagogical process as perceived by students and thus encourage them to improve their pedagogical work. The Dean of the faculty and the directors of individual doctoral programs conduct individual interviews with lecturers at the end of the academic year, and the results of the surveys serve as the starting point for finding improvements in the pedagogical process.

The results of these surveys are used to issue and use student opinions on the pedagogical work of lecturers in the process of election to pedagogical titles. The UNG Quality Commission prepares an analysis of the surveys for these opinions. Representatives of students and the Student Council also take part in this.

In accordance with the Criteria for credit evaluation of study programs according to ECTS, adopted by the SQAA Council at its 11th session on 18 November 2010, published in the Official Gazette of the Republic of Slovenia, no. 95/2010, dated 29. 11. 2010, following the introduction of a new study program, the actual workload of the student is evaluated every academic year until the graduation of the first enrolled generation, and then at least every two years. The *Student Workload Survey* is used to evaluate students immediately after they pass their exams. We updated and greatly simplified the survey in 2014/15. It should be brought closer to the students in this way, and more relevant data on student workload should be obtained as a result. We noticed that the previous survey was very lengthy and difficult to complete.

The results of the *Student Surveys for assessing the quality of individual lecturers' lectures* are summarized in the tables below by program. Because the number of students enrolled in individual study programs is so small, statistical analysis of surveys in a single year is only informative (on average 4-5 students). Nonetheless, the directors of individual programs monitor the survey results and, if a lecturer receives a low rating for several years in a row, take appropriate action. The following is an analysis of average lecturer rates by individual programs and courses. The average rates are calculated by averaging the rates of the survey's individual questions.

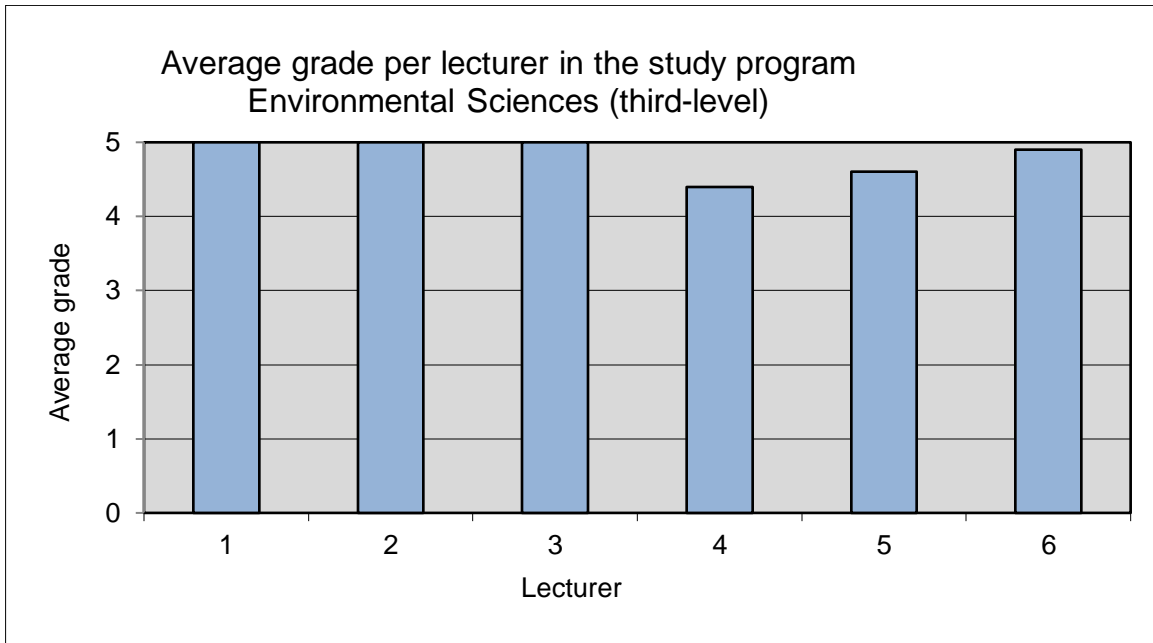
The *Student Survey results for evaluating the study program* present the cumulative data for each study program separately. Students evaluate the study program's implementation as well as the operation of support services such as the library, student office and secretariat, Career Centre, and Student Council. This survey was also updated in 2015/2016.

The *Student Workload Survey* results are also presented in cumulative form for each course and individual study program.

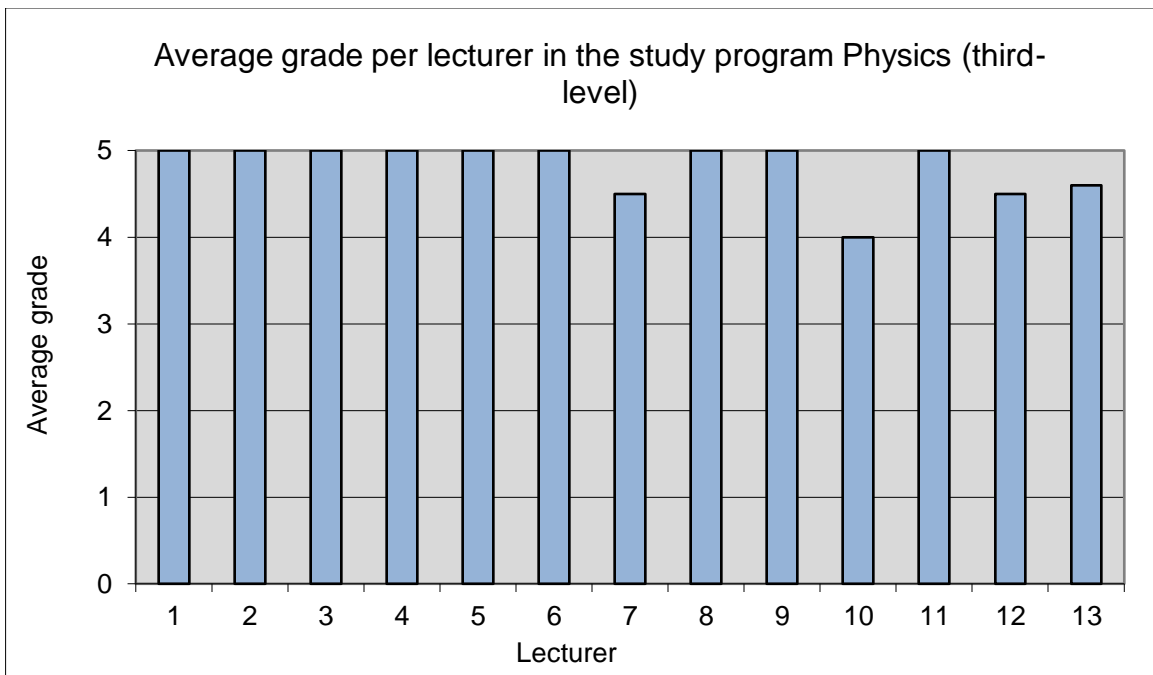
TABLE ON AVERAGE RATES PER LECTURER:

Academic year 2020/2021

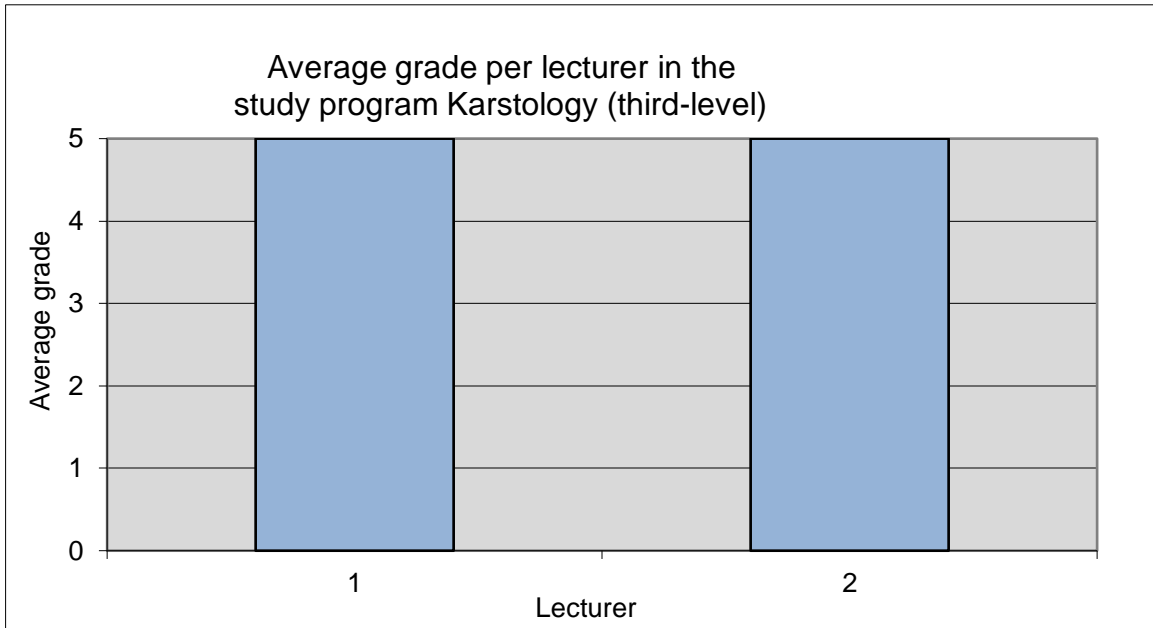
Environmental Sciences



Physics



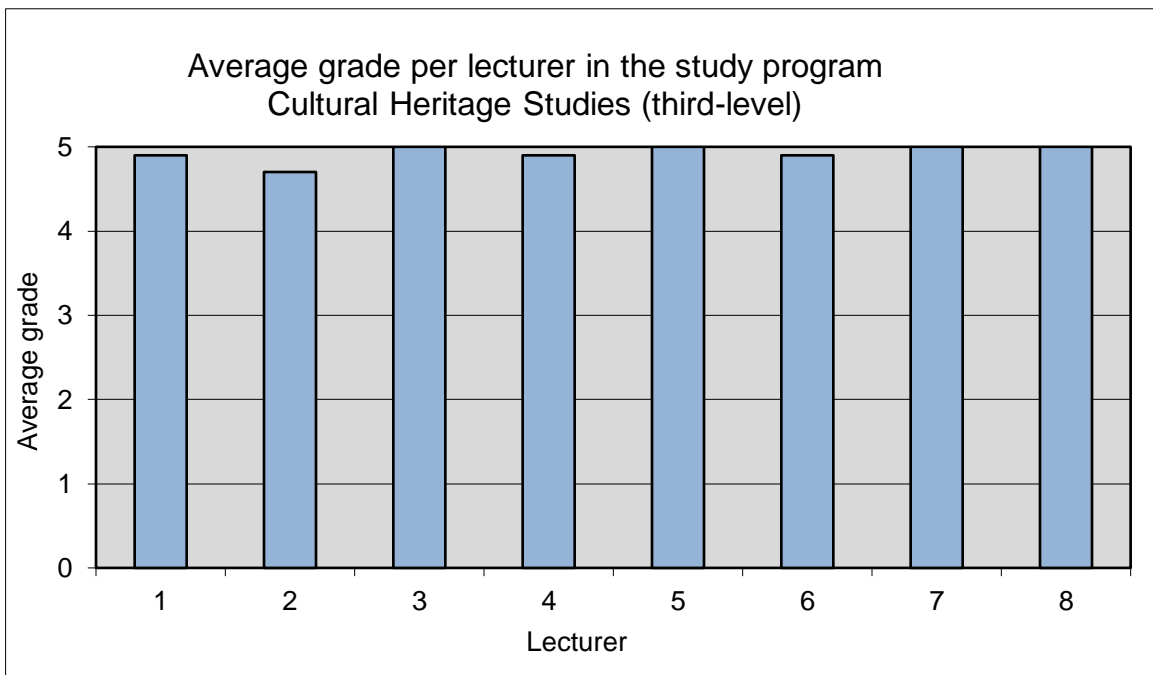
Karstology



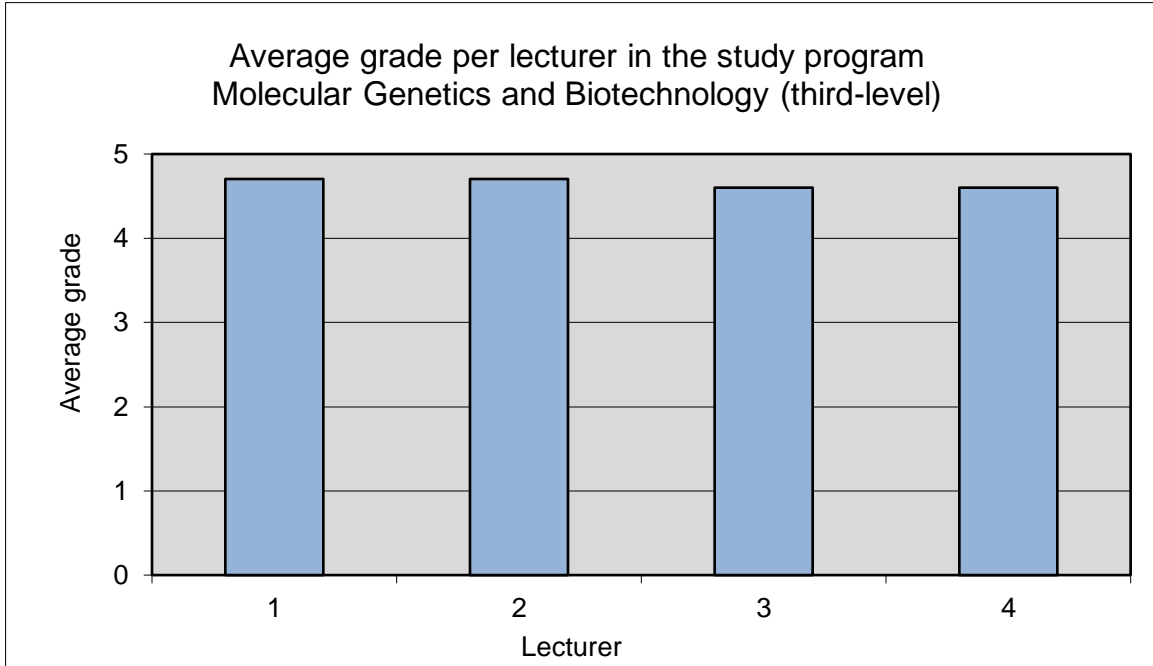
Humanities

There was no lecturer evaluation survey completed in the 2019/20 academic year.

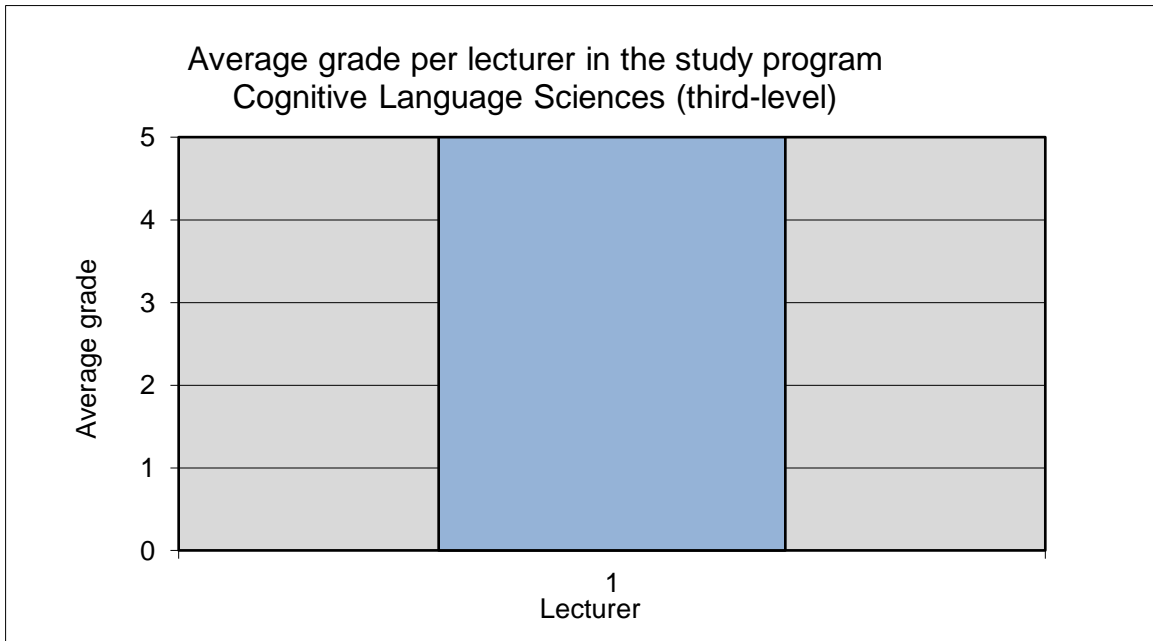
Cultural Heritage Studies



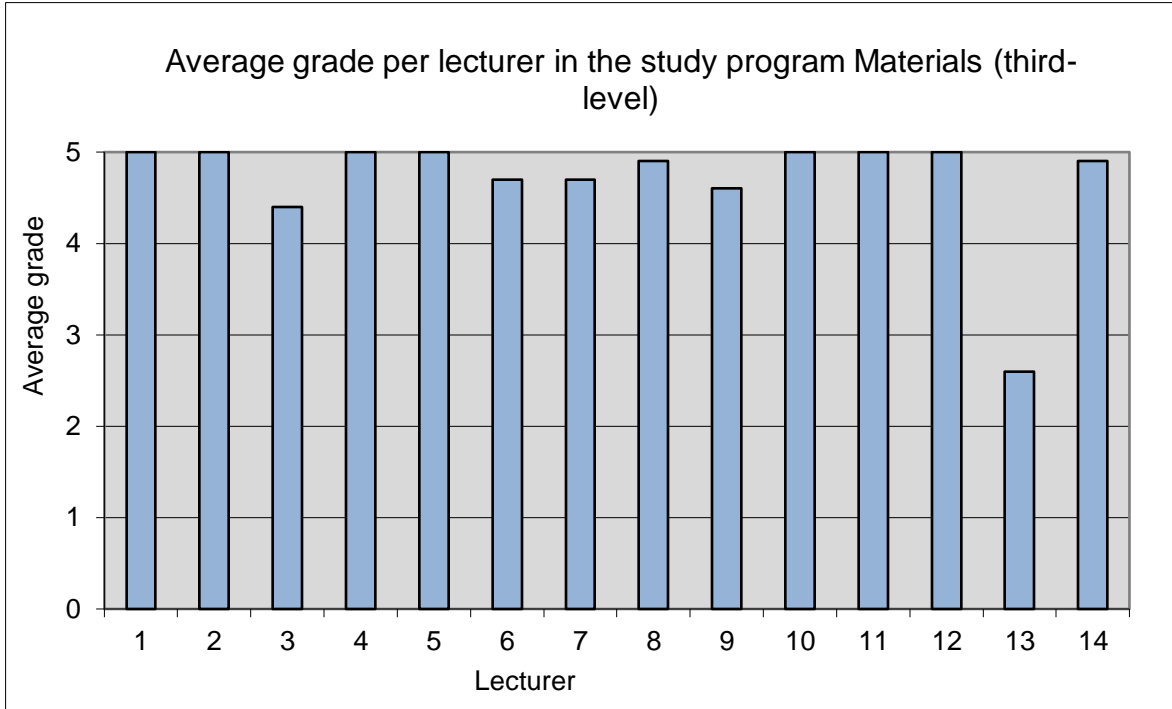
Molecular Genetics and Biotechnology



Cognitive Language Sciences



Materials



Analysis of surveys to evaluate student workload

Academic year 2020/21

Program	Course	Average workload in relation to nominal [%]/student	Number of surveys
Environmental Sciences	Selected Topics in Water Pollution	45	1
	Research work II	9	1
Physics	Surface Science	58	1
	Seminar	59	1
	Structural analysis of materials with x-ray absorption and emission spectroscopy and microscopy	98	1
	Laboratory of Scanning Electron Microscopy	96	1
	Astroparticle physics	32	1
	Communication in science	64	1
	Atmospheric Physics	42	1
	Fundamentals of Free Electron Laser Operation	53	1
	Crystallography	58	1

	Selected Topics from Molecular Spectroscopy	98	1
Karstology			
	Independent research work III	56±22	2
	Independent research work IV	11	1
Cultural Heritage Studies			
	Selected topics in sustainability of heritage: preservation, planning and management	84	1
MGB			
	Research work I	98	1
	Modern trends in molecular biology and biotechnology I	36	1
	Fundamentals of molecular biology and biotechnology	52	1
Materials			
	Seminar	82± 3	4
	Materials for electrochemical devices	57	1
	Materials as catalysts for hydrocarbon conversions	98	1
	Transmission electron microscopy	35	1
	Multi-scale Materials Modelling and Engineering	108± 5	2
	Selected Topics from Molecular Spectroscopy	43	1
	High-Resolution Nuclear Magnetic Resonance	64	1
	Communication in science	89± 7	2

Academic year 2019/20

Program	Course	Average workload in relation to nominal [%]/student	Number of surveys
Physics			
	Communication in science	40±1	2
	Seminar	40	2
	Modern experimental methods in astroparticle physics	32	1
Karstology			
	Ecology of animals in karst aquatic ecotonic habitats	84	1
	Seminar II	83±14	2
	Tracing of karst waters	101	1
	Speleology-selected topics	101	1
	Karst clastic sediments, mineral composition and origin	101	1

	Age of karst sediments in Slovenia	101	1
	Independent research work II	53±15	2
Materials			
	Seminar	109	1
	Advanced functional materials	94	1
	Materials as catalysts for hydrocarbon conversions	57	1
	Materials as catalysts for water and air cleaning	37	1
	Multi-scale Materials Modelling and Engineering	33	1

Academic year 2018/19

Program	Course	Average workload in relation to nominal [%]/student	Number of surveys
Environmental Sciences			
	Selected Topics in Water Pollution	25	1
	Research work II	110	1
Physics			
	Communication in science	126±31	2
	Crystallography	91±3	2
	Research work I	72±16	3
	Solid state chemistry	74±12	2
	Seminar	82±13	3
	High-Resolution Nuclear Magnetic Resonance	119	1
	Selected topics in the field of modern materials	89	1
	Introduction to discretization methods	125±18	2
	Heat and mass transfer	98±4	2
	Selected Topics from Molecular Spectroscopy	73	1
Molecular Genetics and Biotechnology			
	Seminar III	43±14	2
	Modern trends in molecular biology and biotechnology III	47	1
Cognitive Language Sciences			
	Research work III	45	1
	Seminar workshop II	148	1
Karstology			
	Research methodology	76±1	2
	Seminar I	139	1

	Tectonic structures and karstification	78	1
	Independent research work I	34	2
	Cave tourism	84	1

Student Survey results for evaluating the study program

Academic year 2020/21

Study program	Environ mental Sciences	Physics	Karstology	Materials	MGB	Cognitive Language Sciences
	n=1	n=4	n=3	n=8	n=2	n=1
Study program	1-5	1-5	1-5	1-5	1-5	1-5
Are you familiar with the content of the study program?	4	4.8±0.4	4.7±0.5	4.9±0.3	4.5±0.5	5
To what extent does the study program meet your initial expectations?	4	4.8±0.4	4.7±0.5	4.4±0.5	4.5±0.5	5
Do you find exam grading appropriate?	5	5	5	5	5	5
Are you satisfied with the current information on study matters during the academic year?	1	4.5±0.5	4.7±0.5	5	5	5
Would you recommend this study program to your friends?	3	5	4.7±0.5	4.5±0.5	5	5
Library						
How often do you visit the university library?	Never (100%)	Never (100%)	Never (100%)	Never (87,5%) 1x per month (12,5%)	Never (50%) 1x per month (50%)	1x per month
Does the library schedule suit you?	3	3.5 ±0.9	3.7 ±0.9	3.9 ±0.9	5	5
How satisfied are you with the work of the library staff?	3	4±1	3.7 ±0.9	4.1 ±0.9	5	5
Do you believe the library has the necessary teaching materials for your studies?	3	3.8 ±0.8	3.7 ±0.9	3.8 ±0.8	4±1	5
Do you require a reading room in the library?	3	2.5 ±0.9	3±1.6	2.9 ±1.5	3.5 ±1.5	5
Secretariat and Student Office						
How satisfied are you with the work of the secretariat?	3	4.8±0.4	3.7 ±0.9	5	5	5
Are you sufficiently familiar with the work or tasks of the Student Office?	3	4 ±0.7	3.3 ±1.7	4.8±0.4	5	5

How satisfied are you with the Student Office schedule?	3	4.8±0.4	4.7±0.5	4.5±0.7	4.5±0.5	5
How satisfied are you with the work of the staff in the Student Office?	4	4.8±0.4	4.7±0.5	4.6±0.7	4.5±0.5	5
Career Centre						
Are you familiar with the work of the Career Centre (operating since February 2011)?	5	3.8 ±0.8	3±1.6	3.9 ±0.6	2 ±1	3
What are your thoughts on the Career Centre assisting you with your job search?	5	3.5 ±1.7	3±1.6	4±1	5	5
Student Council						
Are you sufficiently familiar with the tasks and activities of the Student Council?	3	3.5 ±1.7	2.3 ±1.9	2.9 ±1.3	2.5 ±1.5	1
Do you believe the Student Council adequately represents your interests?	3	3.3 ±1.5	3.7 ±0.9	3.5 ±0.7	4.5±0.5	5

Academic year 2019/20

Study program	Environmental Sciences	Physics	Karstology	Materials
	n=1	n=3	n=2	n=1
Study program	1-5	1-5	1-5	1-5
Are you familiar with the content of the study program?	4	4.7±0.5	4	5
To what extent does the study program meet your initial expectations?	4	4	4	5
Do you find exam grading appropriate?	5	5	5	5
Are you satisfied with the current information on study matters during the academic year?	4	4.3 ±0.5	3.5 ±0.5	5
Would you recommend this study program to your friends?	3	4.7±0.5	4.5±0.5	5
Library				
How often do you visit the university library?	Never (100%)	Never (100%)	Never (100%)	Never (100%)
Does the library schedule suit you?	3	2.7 ±0.5	3	5
How satisfied are you with the work of the library staff?	3	3	3	5
Do you believe the library has the necessary teaching materials for your studies?	3	3	3	4
Do you require a reading room in the library?	3	2.3 ±0.9	2	5
Secretariat and Student Office				

How satisfied are you with the work of the secretariat?	5	5	4.5±0.5	5
Are you sufficiently familiar with the work or tasks of the Student Office?	4	3.3 ±0.9	4.5±0.5	5
How satisfied are you with the Student Office schedule?	4	3.7 ±0.5	4.5±0.5	5
How satisfied are you with the work of the staff in the Student Office?	4	4.3 ±0.9	4.5±0.5	5
Career Centre				
Are you familiar with the work of the Career Centre (operating since February 2011)?	3	1.7 ±0.9	3	5
What are your thoughts on the Career Centre assisting you with your job search?	3	2.7 ±1.2	3	5
Student Council				
Are you sufficiently familiar with the tasks and activities of the Student Council?	3	2 ±1.4	2.5 ±0.5	5
Do you believe the Student Council adequately represents your interests?	3	3.3 ±0.5	3	5

Academic year 2018/19

Study program	Humanities	Karstology	Environmental Sciences	Physics	MGB	Cultural Heritage Studies
	n=2	n=2	n=1	n=5	n=4	n=1
Study program	1-5	1-5	1-5	1-5	1-5	1-5
Are you familiar with the content of the study program?	4±1	5	4	4.4±0.5	3.8 ±1.6	5
To what extent does the study program meet your initial expectations?	4±1	5	5	4.4±0.5	4 ±1.2	5
Do you find exam grading appropriate?	4.5±0.5	5	5	4.8±0.4	4 ±0.7	4
Are you satisfied with the current information on study matters during the academic year?	3.5 ±1.5	4.5±0.5	5	4.8±0.4	4 ±1.2	5
Would you recommend this study program to your friends?	4±1	5	5	4.2 ±0.7	4 ±1.2	5
Library						
How often do you visit the university library?	Never (50%) 1x per month (50%)	Never (100%)	Never (100%)	Never (80%), 1x per month (20%)	Never (50%), 1x per month (25%), 1x per week (25%)	Never (100%)
Does the library schedule suit you?	5	4.5±0.5	5	3.4 ±0.8	4 ±0.7	4

How satisfied are you with the work of the library staff?	5	4.5±0.5	5	3.4 ±0.8	4 ±0.7	4
Do you believe the library has the necessary teaching materials for your studies?	4.5±0.5	3 ±2	5	3.4 ±0.8	3.8 ±0.8	4
Do you require a reading room in the library?	4.5±0.5	3 ±2	3	2.8 ±0.4	4 ±0.7	4
Secretariat and Student Office						
How satisfied are you with the work of the secretariat?	5	4.5±0.5	5	4.6 ±0.5	4.8±0.4	5
Are you sufficiently familiar with the work or tasks of the Student Office?	4.5±0.5	4.5±0.5	5	4.2 ±0.7	4.5±0.5	5
How satisfied are you with the Student Office schedule?	4±1	4	5	4.6 ±0.5	4.8±0.4	5
How satisfied are you with the work of the staff in the Student Office?	4.5±0.5	4.5±0.5	5	4.6 ±0.5	4.8±0.4	5
Career Centre						
Are you familiar with the work of the Career Centre (operating since February 2011)?	3 ±2	2.5 ±1.5	5	2.8 ±1.0	3.8 ±1.6	5
What are your thoughts on the Career Centre assisting you with your job search?	4.5±0.5	4±1	5	3.2±1.3	3.8 ±1.6	5
Student Council						
Are you sufficiently familiar with the tasks and activities of the Student Council?	3.5 ±1.5	1	4	2.2 ±1.2	3.3 ±1.5	5
Do you believe the Student Council adequately represents your interests?	4±1	4±1	5	3.2 ±0.4	3.3 ±1.5	5

6. 8 SITUATIONAL ANALYSIS AND ORIENTATIONS 2020/2021

Advantages:

Data on student success in both study and individual research work demonstrate that all programs are implemented successfully, with quality and efficiency. The average grades of students are high, exams are usually passed in the first attempt, and the average period of study is shorter. The success of postgraduate studies is also reflected in the successful presentation of high-quality doctorates and master's theses, as well as the numerous publications of student research findings in prestigious international journals. In 2020 and 2021, students published 61 scientific and professional articles, 9 conference papers, 68 conference abstracts, and 13 other publications, demonstrating the high quality of their research work. These achievements undoubtedly attest to the high quality and relevance of the content and teaching methods available in our postgraduate study programs. The commission for the presentation of the doctoral thesis includes at least one member from a

foreign university (two members since 2019), ensuring that the quality of master's and doctoral theses is comparable to global standards.

Student surveys show that lecturers do an excellent job of pedagogical work, which is attributed to individual or small-group work, as well as the personal relationship between lecturers and students. In most programs, the average rate of lecturers is between 4 and 5. In recent years, the quality of lectures has remained high or has even improved. Over the course of a five-year period, there are no significant differences between individual study programs.

We have switched to an entirely electronic method of surveying students in recent years, which has already resulted in a higher number of completed surveys. Since the inception of the electronic survey method, the previous academic year saw the highest number of submitted surveys. In general, this survey now covers most doctoral programs, more surveys have been completed, and the results are more meaningful. The analysis concludes that the student workload does not exceed the prescribed workload within the envisaged ECTS. We see significantly lower workloads than expected in students' individual work. According to the study program evaluation survey, students are most satisfied with the implementation of study programs, as well as the work of secretariats and student offices. They are also satisfied with the work of the library staff. The inclusion of the GS representative in the Student Council has already yielded positive results, as students are now more familiar with the Student Council's work and the possibility of including students in the UNG's decision-making bodies.

Shortcomings:

Due to the limitations of the Covid-19 epidemic, much of the research was done remotely in the last academic year. The individual research work of students and the mobility of students and staff were hampered. We noticed a decrease in the enrolment of foreign students in the last two years after analysing study results. This share was only 44% of all students at the time of the last enrolment, despite having been around 60% for a long time. In 2021, we also saw a decrease in first-year enrolment, which we believe is due, at least in part, to a lower number of enrolled foreign students. The study time was slightly extended, as expected, because students were eligible for the extension due to Covid-19-related impediments. Some students also took advantage of this opportunity. We also noticed a slight deterioration in the advancement from the first to the second year. In student workload surveys, a few students reported fewer hours of research work than expected, most likely due to restrictions on student mobility and the partial closure of UNG laboratories during the worst epidemiological conditions.

Due to the small number of students and surveys received, a statistically adequate presentation of the quality of individual lectures is not possible. The updated survey on student workload is yielding positive results, but the number of completed surveys remains low. It will be necessary to find a way to bring surveys closer to students.

We also noticed that when the course is attended by a small number of students, the response is usually poor, which is explained by the fact that it is impossible to ensure sufficient anonymity in this case. Despite simplified surveys, student response is still highly dependent on active student recruitment for the survey. This approach, however, does not always produce positive results. We have noticed that a portion of the surveys is completed in a way that does not provide us with useful feedback. Examples include surveys in which

all survey questions are filled with the same assessment or surveys in which all survey questions are filled arbitrarily (for related sets of questions).

A subset of completed Workload Survey surveys also revealed that students' workload is, in some cases, much lower than expected in the ECTS, owing primarily to individual student work. This problem is detected in most programs. Students will need to be additionally motivated to complete independent work or to review the requirements and workloads of individual courses. On the other hand, we have received feedback from some students that they are feeling overwhelmed.

We note that students are still unfamiliar with the operation of the Career Centre and the Student Council, which will necessitate continued active promotion.

Opportunities for improvement:

The strategic direction of GS and UNG is to increase activities to attract the most talented and motivated doctoral students from around the world. Prior to the Covid-19 pandemic, more than 60% of GS students were foreign. In the future, we hope to increase the number of foreign students to at least the level before Covid-19, emphasizing GS's international character. Scholarships for doctoral students, for which we are actively seeking additional funds and sources of funding, could increase the enrolment of motivated students.

We will continue to promote student mobility and close collaboration with UNG research units and other research organisations both at home and abroad in order for students to conduct high-quality research. In the event of a Covid-19 outbreak, we will actively seek ways to keep students' research and study work as smooth as possible.

We will actively take care of good conditions for students' research work and the optimal implementation of organised forms of study in third-level doctoral programs so that students can complete their studies within the set deadline. Individual study program directors and secretariats will play an active role in encouraging students to evaluate study programs and lecturers. We will also remind students about the services provided by various UNG support services. We will continue to inform students about the options for co-decision in the study process's implementation and evaluation through the Student Council's representative of doctoral students.

6. 9 SITUATIONAL ANALYSIS AND ORIENTATIONS 2019/2020

Data on student success in both study and individual research work demonstrate that all programs are implemented successfully, with quality and efficiency. The average grades of students are high, exams are usually passed in the first attempt, and the average period of study is shorter. The success of postgraduate studies is also reflected in the successful presentation of high-quality doctorates and master's theses, as well as numerous publications of student research results in prestigious international journals: in 2019 and 2020, we recorded 52 scientific and professional articles and 26 published conference papers, 5454 published conference abstracts, and 11 other scientific publications, indicating the high quality of students' research work. These achievements undoubtedly attest to the high quality and relevance of the content and teaching methods available in our postgraduate study programs. The commission for the presentation of the doctoral

thesis includes at least one member from a foreign university, ensuring that the quality of master's and doctoral theses is comparable to global standards.

Student surveys show that lecturers do an excellent job of pedagogical work, which is attributed to individual or small-group work, as well as the personal relationship between lecturers and students. In most programs, the average rate of lecturers is between 4 and 5. In the last four years of study, the quality of lectures has remained high or has even improved. Over the course of a five-year period, there are no significant differences between individual study programs.

We have switched to an entirely electronic method of surveying students in recent years, which has already resulted in a higher number of completed surveys. Particularly in the evaluation of an individual lecturer and the evaluation of a study program. The revised student workload survey is also yielding positive results. In general, this survey now covers most doctoral programs, more surveys have been completed, and the results are more meaningful. The analysis concludes that the student workload does not exceed the prescribed workload within the envisaged ECTS. We see significantly lower workloads than expected in students' individual work. According to the study program evaluation survey, students are generally satisfied with the work of support services (secretariat, library, student office) and with the implementation of study programs. The inclusion of the GS representative in the Student Council has already yielded positive results, as students are better acquainted with the Student Council's work and the possibility of including students in the UNG's decision-making bodies.

Shortcomings:

Due to the small number of students and surveys received, a statistically adequate presentation of the quality of individual lectures is not possible. The updated survey on student workload is yielding positive results, but the number of completed surveys remains low. It will be necessary to find a way to bring surveys closer to students.

We also noticed that when the course is attended by a small number of students, the response is usually poor, which is explained by the fact that it is impossible to ensure sufficient anonymity in this case. Despite simplified surveys, student response is still highly dependent on active student recruitment for the survey. Because of the epidemiological situation, a part of the year's study activity was conducted remotely. This method of operation was also used during the standard student surveys, and we noticed a decrease in response from students. This confirms our findings that personal contact with students and active promotion are critical for effective and successful student surveys.

This approach, however, does not always produce positive results. We have noticed that a portion of the surveys is completed in a way that does not provide us with useful feedback. Examples include surveys in which all survey questions are filled with the same assessment or surveys in which all survey questions are filled arbitrarily (for related sets of questions). A subset of completed Workload Survey surveys also revealed that students' workload is, in some cases, much lower than expected in the ECTS, owing primarily to individual student work. This problem is detected in most programs. Students will need to be additionally motivated to complete independent work or to review the requirements and workloads of individual courses. On the other hand, we have received feedback from some students that they are feeling overwhelmed.

We note that students are still unfamiliar with the operation of the Career Centre and the Student Council, which will necessitate continued active promotion.

Opportunities for improvement:

The strategic direction of GS and UNG is to increase activities to attract the most talented and motivated doctoral students from around the world. There are over 60% of foreign students at GS. In the future, we hope to increase the numbers of international students, emphasizing GS's international character. Scholarships for doctoral students, for which we are actively seeking additional funds and sources of funding, could increase the enrolment of motivated students.

We will continue to ensure student mobility and close collaboration with UNG research units and other research organisations both at home and abroad in order for students to conduct high-quality research.

We will actively take care of good conditions for students' research work and the optimal implementation of organised forms of study in third-level doctoral programs so that students can complete their studies within the set deadline. Individual study program directors and secretariats will play an active role in encouraging students to evaluate study programs and lecturers. We will also remind students about the services provided by various UNG support services. We will continue to inform students about the options for co-decision in the study process's implementation and evaluation through the Student Council's representative of doctoral students.

6. 10 SITUATIONAL ANALYSIS AND ORIENTATIONS 2018/2019

Advantages:

Data on student success in both study and individual research work demonstrate that all programs are implemented successfully, with quality and efficiency. The average grades of students are high, exams are usually passed in the first attempt, and the average period of study is shorter. The success of postgraduate studies is also reflected in the successful presentation of high-quality doctorates and master's theses, as well as numerous publications of student research results in prestigious international journals: in 2018 and 2019, we recorded 32 scientific and professional articles, 9 published conference papers, 43 published conference abstracts, and 45 other publications, indicating the quality of student research work. These achievements undoubtedly attest to the high quality and relevance of the content and teaching methods available in our postgraduate study programs. The commission for the presentation of the doctoral thesis includes at least one member from a foreign university, ensuring that the quality of master's and doctoral theses is comparable to global standards.

Student surveys show that lecturers do an excellent job of pedagogical work, which is attributed to individual or small-group work, as well as the personal relationship between lecturers and students. The average rate of lecturers ranges between 4 and 5. In the last four years of study, the quality of lectures has remained high or has even improved. There are no significant differences between individual study programs. We have switched to an entirely electronic method of surveying students in recent years, which has already resulted in a higher number of completed surveys. Particularly in the evaluation of an individual

lecturer and the evaluation of a study program. The revised student workload survey is also yielding positive results. In general, this survey now covers most doctoral programs, more surveys have been completed, and the results are more meaningful. The analysis concludes that the student workload does not exceed the prescribed workload within the envisaged ECTS. We see significantly lower workloads than expected in students' individual work. According to the study program evaluation survey, students are generally satisfied with the work of support services (secretariat, library, student office) and with the implementation of study programs. The inclusion of the GS representative in the Student Council has already yielded positive results, as students are better acquainted with the Student Council's work and the possibility of including students in the UNG's decision-making bodies.

Shortcomings:

Due to the small number of students and surveys received, a statistically adequate presentation of the quality of individual lectures is not possible. The updated survey on student workload is yielding positive results, but the number of completed surveys remains low. It will be necessary to find a way to bring surveys closer to students.

We also noticed that when the course is attended by a small number of students, the response is usually poor, which is explained by the fact that it is impossible to ensure sufficient anonymity in this case. Despite simplified surveys, student response is still highly dependent on active student recruitment for the survey. This approach, however, does not always produce positive results. We have noticed that a portion of the surveys is completed in a way that does not provide us with useful feedback. Examples include surveys in which all survey questions are filled with the same assessment or surveys in which all survey questions are filled arbitrarily (for related sets of questions).

A subset of completed Workload Survey surveys also revealed that students' workload is, in some cases, much lower than expected in the ECTS, owing primarily to individual student work. This problem is detected in most programs. Students will need to be additionally motivated to complete independent work or to review the requirements and workloads of individual courses. On the other hand, we have received feedback from some students that they are feeling overwhelmed.

Students are not familiar enough with the operation of the Career Centre, where active promotion will also be required.

Opportunities for improvement:

The strategic direction of GS and UNG is to increase activities to attract the most talented and motivated doctoral students from around the world. There are over 60% of foreign students at GS. In the future, we hope to increase the numbers of international students, emphasizing GS's international character. Scholarships for doctoral students, for which we are actively seeking additional funds and sources of funding, could increase the enrolment of motivated students.

We will continue to ensure student mobility and close collaboration with UNG research units and other research organisations both at home and abroad in order for students to conduct high-quality research.

We will actively take care of good conditions for students' research work and the optimal implementation of organised forms of study in third-level doctoral programs so that students can complete their studies within the set deadline. Individual study program

directors and secretariats will play an active role in encouraging students to evaluate study programs and lecturers. We will also remind students about the services provided by various UNG support services. We will continue to inform students about the options for co-decision in the study process's implementation and evaluation through the Student Council's representative of doctoral students.

7. PREMISES AND EQUIPMENT FOR EDUCATIONAL ACTIVITY

7. 1 PRESENTATION OF AVAILABLE PREMISES AND TEACHING EQUIPMENT

Data on the square footage of classrooms, lecture halls, laboratories, and other spaces used to carry out the study program are included in the spatial conditions. All programs conduct pedagogical activities in lecture halls at Vipavska 13 (P5), Ajdovščina, and the Lanthieri mansion in Vipava. Doctoral dissertations are presented in the doctoral room of the Lanthieri mansion in Vipava. Because doctoral studies are closely linked with UNG research units and partner research institutions in Slovenia and abroad with which we have concluded agreements on cooperation in the implementation of doctoral programs, a portion of pedagogical activities within all programs takes place in these partner institutions. (As a general rule, the list does not include all of the locations where individual students conduct part of their research work, as this varies depending on the individual student's program.) The GS Secretariat and the Dean of the GS are both located at Vipavska 13 in Nova Gorica. Data on the number and size of lecturer's cabinets are not provided because most lecturers are also involved in the research work of the University of Nova Gorica's laboratories and have their own cabinets within these laboratories.

Environmental Sciences

Several lecture halls with audio-visual equipment are available for the implementation of the GS's postgraduate program Environmental Sciences. Students can conduct research in the premises and on the research equipment of the University of Nova Gorica's laboratories (Laboratory for Environmental and Life Sciences, Centre for Atmospheric Research, Centre for Wine Research, Laboratory for Materials Research). The majority of laboratories and lecture halls are located on the premises of the University of Nova Gorica, Ajdovščina and Vipava. This excludes the premises and equipment used by students at the National Institutes of Biology in Ljubljana and Piran, as well as the Institute of Chemistry, where they are studying as part of the Young Researchers project.

The table below contains a list of available multimedia equipment for the implementation of educational activities:

Equipment type	number
Computer equipment by users	
• For non-teaching staff	2
• For teachers	4
Lecture room equipment	
• Fixed projectors	2
• Laptop	1
• Portable projectors	1

Physics

The Physics study program takes place at the University of Nova Gorica, Vipavska 11c in Ajdovščina. The building in Ajdovščina measures 2,200 m² of lecture and laboratory spaces. There is one amphitheatre lecture hall with 150 seats (P1 Geoplin) and four lecture halls with 25 seats in the building (P2, P3, P4 and P5, which is also equipped as a computer room). The building houses the Laboratory for Organic Physics, the Laboratory for Quantum Optics, the Laboratory for Materials Research, the Centre for Astrophysics and Cosmology, and the Centre for Atmospheric Research, where students conduct postgraduate research.

The table below contains a list of available multimedia equipment for the implementation of educational activities:

Equipment type	number
Computer equipment by users	
Desktop computer for students	8
Desktop computer for non-teaching staff	2
Laptop for professors	1
Graphic tablet, camera, stand for professors	5
Lecture room equipment	
Laptops	1
Portable projectors	2
Fixed projectors	3
86" 4K monitor screen	5
Fixed multimedia system (computer, sound system, camera)	4

Karstology

The majority of the doctoral program Karstology activities take place at the Institute for Karst Research ZRC SAZU in Postojna and at the UNG in the Lanthieri mansion in Vipava. The UNG Vipava premises houses the doctoral program's secretariat, a room for dissertation presentations, smaller lecture halls, and one large lecture hall (Aula Magna), where UNG scientific evenings and other public events and conferences are held. The Institute for Karst Research in Postojna offers a space of 760 m². The building has its own research premises and equipment for lecturers in the study program (230 m²), a library that can be used for the study process, which is the largest karst library in the world (49,000 units), a reading room, a lecture hall with 80 seats, laboratories (hydrological, chemical, geological, sedimentological, biological, and microbiological), where students can do their research work, a cadastre of caves, other common areas, as well as rooms for young researchers who are also doctoral students GS (room area is 65 m²). The premises of foreign lecturers at other universities and institutes are also used for the implementation of the program: University of Côte d'Azur, Nice, France, University of Padua, Italy, University of Zagreb, Croatia, University of Silesia, Katowice, Poland, Catholic University of Minas Gerais, Brazil and the Geological Institute of the Czech Academy of Sciences, Prague, Czech Republic.

Students from abroad have the opportunity to temporarily stay in the institute's apartment and work in the cabinet.

The table below contains a list of available multimedia equipment for the implementation of educational activities:

Equipment type	number
Computer equipment by users	
For students	3
For non-teaching staff	3
For teachers	12
Lecture room equipment	
Laptops	3
Portable projectors	1
Televisions	1
Computers	1
Projectors	2
Overhead projector	1

Humanities

Lectures in the study program Humanities have been held on the premises of the Faculty of Humanities since October 2014, and students have access to the same equipment as students of the Faculty of Humanities UNG.

Equipment type	number
Computer equipment by users	
For students	20
For non-teaching staff	1
For teachers	17
Lecture room equipment	
Portable projectors	1
Fixed computers in lecture halls	5
Fixed projectors in lecture halls	5
CD players	4
Overhead projector	3

Cultural Heritage Studies

The school has premises in the Lanthieri mansion in Vipava and at its headquarters in Nova Gorica for the implementation of the postgraduate program Cultural Heritage Studies. Students can conduct research on the premises and equipment of the IUAV University's laboratories in Venice. The IUAV University's libraries, laboratories, and centres are also available. Students can use other partner universities' specialized libraries, centres, and laboratories as needed.

The table below contains a list of available multimedia equipment for the implementation of educational activities:

Equipment type	number
Computer equipment by users	

For teachers (AutoCAD, Micr. Office)	2
Lecture room equipment	
Laptops (Mac, Micr. Office, Autodesk VIZ)	2
Printer	2
Portable projectors	2
Computers (Micr. Office)	2
Video camera	1
Overhead projector	1

Molecular Genetics and Biotechnology

The University of Nova Gorica in Vipava (Lanthieri Palace) and the International Centre for Genetic Engineering and Biotechnology (ICGEB) in Trieste have made their facilities available for the implementation of organised forms of study for the postgraduate program *Molecular Genetics and Biotechnology*. Students can conduct research on the premises and on research equipment at the International Centre for Genetic Engineering and Biotechnology in Trieste, as well as at the Laboratory for Environmental and Life Sciences and the UNG Centre for Wine Research. They can also conduct research in other laboratories both at home and abroad.

The table below contains a list of available multimedia equipment for the implementation of educational activities:

Equipment type	number
Computer equipment by users	
For students	5
For non-teaching staff	1
For teachers	1
Lecture room equipment	
Laptops	2
Portable projectors	2
Televisions	1

Cognitive Language Sciences

The Cognitive Language Sciences study program takes place in lecture halls and other premises of the Faculty of Humanities. The majority of the research conducted by students takes place on the grounds of the Centre for Cognitive Language Sciences.

The table below contains a list of available multimedia equipment for the implementation of educational activities:

Equipment type	number
Computer equipment by users	
For students	3
For non-teaching staff	1
For teachers	5

Lecture room equipment	
Laptops	3
Portable projectors	1
Televisions	/
Computers	5
Projectors	5
CD player	3
Overhead projector	1
Additional multimedia equipment	
Dictaphone	1
Video camera	1

Materials

The doctoral study program Materials is carried out at the Graduate School of the University of Nova Gorica.

The table below contains a list of available multimedia equipment for the implementation of educational activities:

Equipment type	number
Computer equipment by users	
For students	4
For non-teaching staff	1
For teachers	4
Lecture room equipment	
Laptops	1
Portable projectors	2
Televisions	/
Computers	/
Fixed projectors	5

7. 2 SITUATIONAL ANALYSIS AND ORIENTATION 2020/2021

Environmental Sciences

Advantages:

Doctoral students spend the majority of their time working in laboratories with their mentors, so there are no special requirements in this area. For communication between lecturers and doctoral students, various communication channels (MeTeam, Zoom, Skype, etc.) are available.

Shortcomings:

Physical access restrictions to lecture halls for students who are present, as well as the problem of foreign students with work permits in Slovenia linked to COVID 19 and financial guarantees for their stay in Slovenia.

Scope for improvements:

First, address the COVID 19 issue as well as the financial threshold.

Timetable for making improvements or eliminating weaknesses:

Improvements after COVID 19 crisis. Only long-distance communication - MeTeam, introduced by UNG - can currently be improved.

Physics

Advantages:

New equipment for conducting online lectures was purchased for the 2020/21 academic year. There is sufficient space and modern equipment to conduct pedagogical activities in the so-called hybrid mode. The computer room is equipped with modern and powerful computer equipment.

Students conduct research in UNG research laboratories in Ajdovščina and Nova Gorica, as well as partner laboratories throughout the world and in Slovenia.

Shortcomings:

Our requirements are met by the equipment and space available. There are no shortcomings.

Scope for improvements:

/

Timetable for making improvements or eliminating weaknesses:

/

Karstology

Advantages:

We discover that the situation fully corresponds to the number of enrolled students and that adequate appropriate premises and equipment are available for the doctoral program's implementation. The advantage of a smaller number of students is direct communication with professors and collaboration with them in field and office work. Students have the option of free temporary accommodation in the Institute's apartment.

Shortcomings:

We did not detect any shortcomings.

Scope for improvements:

The study program runs smoothly and without problems. We have no issues with the study's material conditions. We will continue to strive for the program's continuous improvement, and we will conduct extensive promotion in order to achieve a slightly higher enrolment.

Timetable for making improvements or eliminating weaknesses:

Not required at this time.

Humanities**Advantages:**

We have enough space for pedagogical and research activities, as well as a favourable location for the study of literary and cultural heritage and migration. We also meet the prerequisites for distance learning.

Shortcomings:

The premises are extremely hot during the summer months.

Scope for improvements:

Air conditioners, which were installed in the summer of 2021, would improve the quality of work during the summer months.

Timetable for making improvements or eliminating weaknesses:

It is not necessary because the problems have been resolved.

Cultural Heritage Studies**Advantages:**

The premises and equipment required for the study program's implementation are currently adequate. Regular collaboration with public institutions and universities provides students with access to the partner Iuav University of Venice's laboratories, centres, and Europe's best-equipped library for architecture, urban planning, and cultural economics.

Shortcomings:

One of the most significant constraints is the lack of accommodation for students and visiting professors.

Access to a large number of electronic bibliographic sources for the study program's subject areas has yet to be arranged.

Scope for improvements:

Consistent and immediate accommodation arrangements are urgently needed. Increasing the scope of the main bibliographic offer. Students can obtain a residence visa for Italy through the implementation of a double degree with the University of Iuav, where the offer of accommodation is more extensive and appealing.

Timetable for making improvements or eliminating weaknesses:

We intend to expand our bibliographic offer by 2023.

We intend to encourage students to choose the option of a double degree, which allows them to stay and reside in Italy, by arranging the necessary accommodation for the needs of the entire university.

Molecular Genetics and Biotechnology

Advantages:

The merger of the Centre for Biomedical Sciences and the Laboratory for Environmental Research into a joint Laboratory for Environmental and Life Sciences has aided in the formation of a critical mass of researchers in related and complementary fields. In addition, the joint laboratory has more equipment, and we are more competitive in acquiring new ones. Because of the close proximity of strong local research centres, lecturers can exchange ideas and students can benefit from more research opportunities.

Shortcomings:

Most students conduct research outside of places where organised forms of study are conducted.

Scope for improvements:

The new Laboratory enables the development of fundamental and applied research in molecular biology and biotechnology. This will undoubtedly necessitate an increase in fundraising activities to enable the preservation and advancement of the field of biomedicine at UNG.

Timetable for making improvements or eliminating weaknesses:

In the academic year 2021/2022, prioritize obtaining an appropriate research program in the field of biomedicine.

Cognitive Language Sciences

Advantages:

The program's existing infrastructure is currently adequate for program implementation.

Shortcomings:

We found no significant shortcomings during the 2020/21 academic year.

Scope for improvements:

We intend to build a new laboratory space for experimental work at the Centre for Cognitive Language Sciences in the coming academic year, which will also be available to doctoral students.

Timetable for making improvements or eliminating weaknesses:

The implementation of this improvement is scheduled for the following academic year.

7.3 SITUATIONAL ANALYSIS AND ORIENTATIONS 2019/2020

Environmental Sciences

Advantages:

The infrastructural conditions in the current scope are also suitable for the implementation of the study program Environmental Sciences in 2019/2020 (premises and equipment). The majority of students conduct research at UNG research laboratories in Nova Gorica, Ajdovščina, and Vipava, as well as at the National Institute of Biology in Ljubljana and Piran, and on occasion at other institutions, where they have all of the necessary conditions for continuous research work. The lecture halls at the UNG location are suitable in terms of size and technical equipment depending on the number of listeners.

Shortcomings:

Participation in lectures/seminars is somewhat difficult due to the distance of students who are located in Ljubljana, as they spend a lot of time on travelling. This is especially restrictive when the weather on the roads is bad (bora, snow). The number of new enrolments in this regard has decreased as a result of the ARRS's stricter conditions for obtaining MR, which has been a trend since 2016/2017.

Scope for improvements:

Enrolment is determined by the individual mentor's activities as well as the investment in the promotion of studies. We attend seminars for students from remote/dislocated locations using digital technologies that enable remote participation. This is certainly relevant in 2020 due to the Covid-19 outbreak.

Physics

Advantages:

We believe that the infrastructural conditions (premises and equipment) for the Physics study program are currently adequate. Students conduct research in UNG research laboratories in Ajdovščina and Nova Gorica, as well as partner laboratories throughout the world and in Slovenia.

Shortcomings:

We did not detect any shortcomings.

Scope for improvements:

The new premises, particularly the unified UNG campus, will result in significant improvements, particularly if enrolment increases further. New equipment (cameras, large monitor screens) planned for the next academic year would be desirable due to the university's shift to online teaching.

Karstology

Advantages:

The situation fully corresponds to the number of enrolled students and that adequate appropriate premises and equipment are available for the postgraduate program's implementation. The advantage of a smaller number of students is direct communication with professors and collaboration with them in field and office work. Students have the option of free temporary accommodation in the Institute's apartment.

Shortcomings:

We did not detect any shortcomings.

Scope for improvements:

The study program runs smoothly. We will continue to strive for the program's continuous improvement, and we will conduct extensive promotion in order to achieve a slightly higher enrolment.

Humanities

Advantages:

We have enough space for pedagogical and research activities, as well as a favourable location for the study of literary and cultural heritage and migration. We also meet the prerequisites for distance learning.

Shortcomings:

The premises are extremely hot during the summer months.

Scope for improvements:

Air conditioners would improve the quality of work during the summer months.

Cultural Heritage Studies

Advantages:

The premises and equipment required for the study program's implementation are currently adequate. Students have access to one of Europe's largest libraries in the fields of architecture, urban planning, and cultural economics thanks to regular collaboration with public institutions and universities.

Shortcomings:

The lack of accommodation for students and visiting professors at the headquarters continues to severely limit the program's effectiveness.

Access to a large number of electronic bibliographic sources for the study program's subject areas.

Scope for improvements:

Consistent and immediate accommodation arrangements of local subsidized accommodation in Vipava and Nova Gorica is critical. Increasing the scope of the main bibliographic offer.

Molecular Genetics and Biotechnology

Advantages:

The merger of the Centre for Biomedical Sciences and the Laboratory for Environmental Research into a joint Laboratory for Environmental and Life Sciences has aided in the formation of a critical mass of researchers in related and complementary fields. In addition, the joint laboratory has more equipment, and we are more competitive in acquiring new ones. Because of the close proximity of strong local research centres, lecturers can exchange ideas and students can benefit from more research opportunities.

Shortcomings:

Limited sources of funding for students' research work. The physical separation of the students' pedagogical and research work is created by the relocation of the main part of the laboratory to a new address in Rožna Dolina. Most students conduct research outside of places where organised forms of study are conducted.

Scope for improvements:

The new Laboratory enables the development of fundamental and applied research in molecular biology and biotechnology. This will undoubtedly necessitate an increase in fundraising activities to enable the preservation and advancement of the field of biomedicine at UNG.

Cognitive Language Sciences

Advantages:

We have a solid and up-to-date infrastructure for implementing theoretical and experimental disciplines in cognitive language sciences. The experimental laboratory of the Centre for Cognitive Language Sciences, which includes a modern eye tracking device and software for psycholinguistic research in language in addition to personal computers, is also intended for students of the study program. We also received ARRS funds for the purchase of modern electro-encephalographic equipment for measuring event-dependent potentials during the 2018/19 school year.

Shortcomings:

We did not notice any significant infrastructural deficiencies during the 2019/20 academic year.

Scope for improvements:

To better involve students in experimental work, we strive to obtain funding from infrastructure projects that will allow us to purchase and maintain experimental equipment for psycholinguistic and neurolinguistic research.

7. 4 SITUATIONAL ANALYSIS AND ORIENTATIONS 2018/2019

Environmental Sciences

Advantages:

The infrastructural conditions (premises and equipment) for the implementation of the study program Environmental Sciences in 2018/2019 are also appropriate to date. The majority of students conduct research at UNG research laboratories in Nova Gorica, Ajdovščina, and Vipava, as well as at the National Institute of Biology in Ljubljana and Piran, and on occasion at other institutions, where they have all of the necessary conditions for continuous research work. The lecture halls at the UNG location are suitable in terms of size and technical equipment depending on the number of listeners.

Shortcomings:

Participation in lectures/seminars is somewhat difficult due to the distance of students who are located in Ljubljana, as they spend a lot of time on travelling. This is especially restrictive when the weather on the roads is bad (bora, snow). The number of new enrolments in this regard has decreased as a result of the ARRS's stricter conditions for obtaining MR, which has been evident since 2016/2017.

Scope for improvements:

Enrolment is determined by the individual mentor's activities as well as the investment in the promotion of studies. We attend seminars for students from remote/dislocated locations using digital technologies that enable remote participation.

Physics

Advantages:

We believe that the infrastructural conditions (premises and equipment) for the Physics study program are currently adequate. Students conduct research in UNG research laboratories in Ajdovščina and Nova Gorica, as well as partner laboratories throughout the world and in Slovenia.

Shortcomings:

Due to laboratory dislocation, it is sometimes more difficult to coordinate lectures, and contact between the various subfields covered in the study program is less than ideal.

Scope for improvements:

The new premises, particularly the unified UNG campus, will result in significant improvements, particularly if enrolment increases further.

Karstology

Advantages:

The situation fully corresponds to the number of enrolled students and that adequate appropriate premises and equipment are available for the postgraduate program's implementation. The advantage of a smaller number of students is direct communication with professors and collaboration with them in field and office work. Students have the option of free temporary accommodation in the Institute's apartment.

Shortcomings:

We did not detect any shortcomings.

Scope for improvements:

The study in this regard runs smoothly.

Humanities

Advantages:

We have enough space for pedagogical and research activities, as well as a favourable location for the study of literary and cultural heritage and migration.

Shortcomings:

The premises are extremely hot during the summer months.

Scope for improvements:

Air conditioners would improve the quality of work during the summer months.

Cultural Heritage Studies

Advantages:

The premises and equipment required for the study program's implementation are currently adequate. A long-standing collaboration with Iuav University in Venice adds value and creates a suitable, appealing environment for students to study and research. Students have access to one of Europe's largest libraries in the fields of architecture, urban planning, and cultural economics thanks to regular collaboration with public institutions and universities. Cooperation with the *Centro Studi per la Pace* and the *International Academy for Environmental Sciences* in 2018/19 also gave us access to student accommodation facilities, which primarily meets the bridging needs of students conducting research at a partner university.

Shortcomings:

The lack of accommodation for students and visiting professors at the headquarters continues to severely limit the program's effectiveness. Access to a large number of electronic bibliographic sources for the study program's areas.

Scope for improvements:

We see the program's implementation in two locations as a benefit for understanding the issues related to the thematic area of study, as they provide both local specifics and the universality of the global heritage context. Consistent and immediate accommodation arrangements of local subsidized accommodation in Vipava and Nova Gorica will undoubtedly be required.

Molecular Genetics and Biotechnology

Advantages:

The merger of the Centre for Biomedical Sciences and the Laboratory for Environmental Research into a joint Laboratory for Environmental and Life Sciences has aided in the formation of a critical mass of researchers in related and complementary fields. In addition, the joint laboratory has more equipment, and we are more competitive in acquiring new ones. Because of the close proximity of strong local research centres, lecturers can exchange ideas and students can benefit from more research opportunities.

Shortcomings:

Limited sources of funding for students' research work. The physical separation of the students' pedagogical and research work is created by the relocation of the main part of the laboratory to a new address in Rožna Dolina. Most students conduct research outside of places where organised forms of study are conducted.

Scope for improvements:

The new Laboratory enables the development of fundamental and applied research in molecular biology and biotechnology. This will undoubtedly necessitate an increase in fundraising activities to enable the preservation and advancement of the field of biomedicine at UNG.

Cognitive Language Sciences

Advantages:

We have a solid and up-to-date infrastructure for implementing theoretical and experimental disciplines in cognitive language sciences. The experimental laboratory of the Centre for Cognitive Language Sciences, which includes a modern eye tracking device and software for psycholinguistic research in language in addition to personal computers, is also intended for students of the study program. We also received ARRS funds for the purchase of modern electro-encephalographic equipment for measuring event-dependent potentials during the 2018/19 school year.

Shortcomings:

We did not notice any significant infrastructural deficiencies during the 2018/19 academic year.

Scope for improvements:

To better involve students in experimental work, we strive to obtain funding from infrastructure projects that will allow us to purchase and maintain experimental equipment for psycholinguistic and neurolinguistic research.

8. FINANCING OF STUDY ACTIVITIES

Tuition fees are used entirely to fund the implementation of pedagogical work on third-level doctoral study programs of GS. Tuition fees for all doctoral studies are EUR 4,000 per year.

8.1 SITUATIONAL ANALYSIS AND ORIENTATIONS 2018-2021

Advantages:

Tuition fees provide funding for the Graduate School. The funds are sufficient for the implementation of the programs. The state co-finances doctoral students at UNG, in part through the Ad futura scholarship fund and in part through the fund for young researchers. UNG has enabled some doctoral students' tuition fees to be co-financed by involving doctoral students in international research projects obtained by UNG research units or through research and application projects obtained by UNG through UNG partnerships with industry partners. UNG also includes doctoral students as assistants in the pedagogical process at the first and second levels, allowing them to partially cover the costs of doctoral studies.

All students at UNG have free access to research equipment for their research projects within UNG research units. Students who conduct research at partner research institutions in Slovenia and abroad, where their mentors and doctoral lecturers work, have free access to research equipment. Through the ERASMUS plus project, UNG enables doctoral students to exchange and conduct research at foreign universities and research institutions.

Shortcomings:

Because the relevant ministry excluded UNG students (and students from other independent higher education institutions) pursuing doctoral studies from this tender, a significant proportion of doctoral students who did not receive co-financing from young researchers or Ad future scholarships have been unable to participate in the innovative doctoral student funding scheme since 2016/2017. The scheme has also significantly aided the inclusion of foreign students in our postgraduate study programs.

Scope for improvements:

In the future, it will be critical to provide a new, long-term stable scholarship scheme for doctoral students in order to foster the development and international competitiveness of Slovenian doctoral programs. As a result, UNG will become more competitively appealing to foreign students. It will be possible, in particular, to attract even more talented young people from less developed countries (the Balkans, Eastern Europe and elsewhere in the world).

The University strives to make its doctoral programs available to all students who demonstrate an interest in and talent for research work, regardless of social status, and it is also looking for opportunities to award various scholarship schemes to domestic and foreign students to co-finance their studies. This is especially important given the discontinuation of scholarships from the innovative scheme, to which UNG doctoral

students are no longer entitled. Possible sources of co-financing doctoral students include research projects acquired by UNG research units or collaboration with industry partners who directly co-finance doctoral students for research related to their activity, as well as involving doctoral students in the pedagogical process as assistants at the first and second levels. International agreements with EU funds (Erasmus Plus...) and exchange agreements with universities in other non-European countries are also important sources of funding for doctoral student exchanges.

Based on development agreements in 2020, the Ministry of Foreign Affairs, in collaboration with the Ministry of Education, Science, and Sport, will publish a public tender for scholarships for foreign citizens to study in Slovenia for doctoral studies in Karstology at the end of 2020. The main objective of awarding scholarships for foreign citizens to study in the Republic of Slovenia on the basis of development agreements is to promote international education, achieve a higher level of education for citizens of partner countries, and acquire knowledge in priority areas. This tender is for two scholarships to be awarded to citizens of the recipient country or beneficiary of development aid in the academic year 2021/2022, namely the postgraduate third-level study program Karstology (doctoral study), which is carried out at the Graduate School within the University of Nova Gorica. The doctoral study of karstology in Slovenia is the world's only comprehensive study of karstology. The public tender can be accessed through the following links:

<https://www.srips-rs.si/vsi-razpisi/razpis/stipendije-za-izobrazevanje-tujih-drzavljanov-na-podlagi-razvojnih-dogovorov-v-letu-2020-306-jr>

Citizens of recipient countries or recipients of official development assistance (OECD DAC) are eligible to participate in the public tender.

9. APPLICATIVE AND DEVELOPMENT ACTIVITY, INDUSTRY COOPERATION

9.1 PRESENTATION OF APPLICATIVE ACTIVITY BY PROGRAMS

Applicative activity, like research activity, takes place in laboratories, research centres, and institutes at the University of Nova Gorica. The evaluation of GS employees' applicative and developmental work is not included in this report, but it is included in the self-evaluation report for UNG as a whole in the University of Nova Gorica's annual Work Reports. We will list specific development and applicative activities that are specifically related to the work of postgraduate students here.

Environmental Sciences

The research activity in which students from the postgraduate study program Environmental Sciences are involved reflects both economic and non-economic needs. This is also evident in the contents of a significant proportion of doctoral dissertations, which were written on request and in collaboration with economy users and other research clients. Cooperation with the industry has recently declined as a result of the smaller number of students.

Cooperation took place with the following economic and other institutions in 2020/2021:

- Institute of Chemistry, Ljubljana
- Jožef Stefan Institute, Ljubljana
- Environmental Agency of the Republic of Slovenia (ARSO)
- Regional Development Agency of Northern Primorska, Nova Gorica
- National Institute of Biology, Ljubljana
- Institute of Public Health Nova Gorica
- Institute of Civil Engineering, Ljubljana

Physics

The following companies and institutions are involved in collaboration:

- Elettra Synchrotron Laboratory, Trieste, Italy,
- Jožef Stefan Institute, Ljubljana,
- Institute CES d.o.o., Šmarješke Toplice,
- Università di Trieste, Trieste, Italy,
- CNR-IOM, Trieste, Italy,
- Università Cattolica del Sacro Cuore, Brescia, Italy,
- Coastal Technology Park, Šempeter,
- L'Istituto di Struttura della Materia CNR, Italy.

Karstology

The Karstology program has established cooperation with many universities around the world. Karst experts from the Universities of Ljubljana, Maribor, and Primorska, as well as universities from European and non-European cities, are currently involved in the research process, primarily as mentors and commission members.

The program attempts to meet the needs of the economy primarily through appropriate doctoral theses, in which other organisations participate through co-financing or other assistance (in the preparation of tasks or in the necessary research). Traditionally, in addition to the municipalities located in the karst territory, these are the Škocjan Caves Park and Postojna Cave d.d.

Humanities

The program's doctoral students and professors' research contributes to our understanding of literary and cultural heritage in both the domestic and international contexts, as well as new insights into migration and intercultural relations. The program is linked to all institutions on both sides of the border (SLO, ITA) to which the UNG Faculty of Humanities is linked, namely:

- France Bevko Library in Gorizia,
- Gorizia Museum,
- National and Study Library in Trieste,
- D. Feigl Library in Gorizia,
- SLORI,
- Slov. I. K.,
- SNG Nova Gorica,
- ZRC SAZU Nova Gorica,
- Gorizia Literary Club Govorica,
- Secondary gymnasium Nova Gorica,
- Slavic Society Nova Gorica,
- TIC Brda
- D. I. Z. Gregorčič, Gorizia.

Cultural Heritage Studies

In 2020/21, we continued to conduct research as part of the CLIC and URBiNAT projects (HORIZONT2020). Cooperation with the economy is also facilitated by partner universities and organisations: the IUAV University of Venice (HeModern Hub), the Polytechnic of Milan, the Federico II University of Naples, the UNISCAPE University Network for the Implementation of the European Landscape Convention and the ICCROM (International Centre for the Study of the Preservation and Restoration of Cultural Property).

Molecular Genetics and Biotechnology

The *Molecular Genetics and Biotechnology* program has established cooperation with the International Centre for Genetic Engineering and Biotechnology in Trieste (Italy) by mutual agreement. Some students are involved in various biotechnology companies as part of their research (Bia Separations, Postojna Animal Hospital, Ulisse Biomed, wine industry...).

We are also attempting to collaborate with other related companies in Slovenia and the surrounding region, such as Animacell, Educell, and B2.

Cognitive Language Sciences

Students frequently conduct experimental activities in the field of cognitive language sciences with collaborating grammar and primary schools in the Gorizia region as part of their doctoral studies. Doctoral students are also regularly involved in the activities of the Language Counselling Centre Multilingualism Velja, which is run by the Centre for Cognitive Language Sciences.

Materials

Through projects of doctoral mentors at UNG, the Institute of Chemistry, and the Jožef Stefan Institute, the doctoral program Materials has established collaboration with other institutes and universities, as well as the industry, both at home and around the world.

In Slovenia: University of Ljubljana, University of Maribor, Silkem Kidričevo company, Cinkarna Celje company and others.

Abroad: University of Trieste, Synchrotron ELETTRA in Italy, Synchrotron DESY in Germany, University of Leipzig, University of Cincinnati USA, NESTE Finland, Global Bioenergy France and others.

9. 2 SITUATIONAL ANALYSIS AND ORIENTATION 2020/2021

Environmental Sciences

Advantages:

Students gain the knowledge required for specialized areas in which they are interested. This is especially true in areas where candidates are drawn from the ranks of users, as the entire doctoral study is tailored to the candidates' individual needs/requirements.

Shortcomings:

According to the above paragraph, we do not see any shortcomings.

Scope for improvements:

Given that the educational process of each individual is tailored to their specific needs and expectations, this process is ongoing.

Timetable for making improvements or eliminating weaknesses:

See note above - ongoing process.

Physics

Advantages:

We believe that the industrial cooperation of research activities covered in the study program Physics is exemplary and, when compared to the previous academic year, has been improved by applying for joint projects for the employment of young Doctors of Science with several economic entities.

Shortcomings:

We did not detect any shortcomings.

Scope for improvements:

We want to expand our collaboration with high-tech companies, both for the possibility of joint projects and thus additional funding, and for increased employment opportunities for new Doctors of Science.

Timetable for making improvements or eliminating weaknesses: /

Karstology

Advantages:

In addition to the basic study guidelines, there are several useful research opportunities for students in the context of their doctoral dissertations: some are useful for the further development of karst science, contain new knowledge and data, and are also useful for related sciences (geomorphology, hydrogeology, geology, biology, microbiology, ecology, physics), whereas others can be directly useful, such as learning about the transfer of pollutants into the karst underground (important for the protection of karst water and the preparation of regulations for protection), protection and appropriate arrangement of tourist caves, assessment of the condition of the karst surface and underground. Specifically, we are linked to all state and leading foreign institutions that are in any way related to the karst.

Shortcomings:

We did not notice any shortcomings.

Scope for improvements:

We are not planning any changes to the program. We intend to slightly increase enrolment while also encouraging students to broaden and integrate basic knowledge in applicative areas.

Timetable for making improvements or eliminating weaknesses:

Not required at this time.

Humanities

Advantages:

Students can transfer and expand their knowledge in a cross-border setting.

Shortcomings:

Lack of awareness of cross-border employment opportunities.

Scope for improvements:

Consistent collaboration between UNG and cross-border institutions, as well as student participation in inter-institutional meetings and other cross-border events.

Timetable for making improvements or eliminating weaknesses:

Invitation of students to the ICM conference in Gorizia (November 2021), a meeting of senior students with SLORI (April 2022) as part of a research seminar. Responsible person: Program Director.

Cultural Heritage Studies

Advantages:

Cooperation with institutions was limited in 2020/21 due to the exceptional circumstances of the Covid-19 pandemic. As a result, the main research activity was carried out primarily within the framework of both Horizon 2020 projects, where students were able to learn about a diverse range of public and private sector organisations that facilitate research collaboration.

Shortcomings:

We do not see a lack of cooperation. We see the most significant shortcoming in the program's promotion, which is still lacking.

Scope for improvements:

Strengthen promotion through continued acquisition of international projects as well as stronger promotion of all activities offered by the program (e.g., lifelong learning, project services, etc.).

Timetable for making improvements or eliminating weaknesses:

Promotion and greater visibility of all activities and services offered by CHS (since 2022)

Molecular Genetics and Biotechnology

Advantages:

Excellent response from the biotechnology sector in terms of providing a research environment and participating in the implementation of study activities. Staff scholarships for doctoral students have also improved.

Shortcomings:

Economic resources are limited, as are resources dedicated to industry collaboration. Relatively few suitable businesses in the area. Students from the industry have lower performance, which is reflected in frequent interruptions of study and a relatively long period of study.

Scope for improvements:

Improved collaboration with industry and joint activities with other research and medical centres in the region. Tutoring system to assist students from the industrial sector or university co-mentors.

Timetable for making improvements or eliminating weaknesses:

During the academic year 2021/2022, the program's director will compile a list of students from the industrial environment, as well as a proposal for the types of assistance they will require to complete their studies. Contacting appropriate companies for doctoral student scholarships (program director).

Cognitive Language Sciences

Advantages:

Students in the doctoral program acquire competencies that are useful for performing a variety of application tasks in areas such as foreign language didactic development, publishing, language documentation, and language counselling.

Shortcomings:

The relatively small number of students enrolled in the program, as well as the small number of companies in the narrower area dealing with linguistic or linguistic aspects, currently limit the expansion of doctoral students' collaboration with the industry.

Scope for improvements:

We see room for improvement in the search for potential industrial partners outside of the narrower area, as well as the development of joint training programs and cooperation in program implementation.

Timetable for making improvements or eliminating weaknesses:

We intend to hold a meeting of the program's scientific council in the coming academic year to discuss increased involvement of doctoral students in applicative activities directly related to their doctoral studies.

9. 3 SITUATIONAL ANALYSIS AND ORIENTATIONS 2019/2020

Environmental Sciences

Advantages:

We encourage or follow the recommendations of the relevant ministry in the program and in practice, which recommends closer links between the industry and other end-

users on the one hand and the University as the carrier of the educational process on the other. Students benefit from such collaboration as well, as they have a better chance of a successful career, especially those looking for work outside the academic sphere after graduation.

Shortcomings:

So far, this practice has been successful. Thus, we did not notice any perceived shortcomings.

Scope for improvements:

We see an improvement in the situation, particularly in increased cooperation with the economy and administrative services, both as a result of the possibility of joint projects, professional advice, and the increased possibility of hiring new Doctors of Science.

Physics

Advantages:

We believe that the industrial cooperation of research activities covered in the study program Physics is exemplary and, when compared to the previous academic year, has been improved by applying for joint projects for the employment of young Doctors of Science with several economic entities.

Shortcomings:

We did not detect any shortcomings.

Scope for improvements:

We want to expand our collaboration with high-tech companies, both for the possibility of joint projects and thus additional funding, and for increased employment opportunities for new Doctors of Science.

Karstology

Advantages:

In addition to the basic study guidelines, there are several useful research opportunities for students in the context of their doctoral dissertations: some are useful for the further development of karst science, contain new knowledge and data, and are also useful for related sciences (geomorphology, hydrogeology, geology, biology, microbiology, ecology, physics), whereas others can be directly useful, such as learning about the transfer of pollutants into the karst underground (important for the protection of karst water and the preparation of regulations for protection), protection and appropriate arrangement of tourist caves, assessment of the condition of the karst surface and underground. Specifically, we are linked to all state and leading foreign institutions that are in any way related to the karst.

Shortcomings:

We did not notice any shortcomings.

Scope for improvements:

We are not planning any changes to the program. However, we intend to increase enrolment and are currently negotiating two scholarships with the Ministry of Foreign Affairs for 2021.

Humanities

Advantages:

Students can transfer and expand their knowledge in a cross-border setting.

Shortcomings:

Lack of awareness of cross-border employment opportunities.

Scope for improvements:

Consistent collaboration between UNG and cross-border institutions, as well as student participation in inter-institutional meetings and other cross-border events.

Cultural Heritage Studies

Advantages:

Despite the exceptional circumstances created by the Covid-19 pandemic, cooperation is also satisfactory in 2019/20. This year's main research activity was primarily carried out within the framework of both Horizon 2020 projects.

Shortcomings:

Enrolment is also low this year, despite being higher than last year.

Scope for improvements:

Significant increase in enrolment and continuation of work to obtain EU research projects.

Molecular Genetics and Biotechnology

Advantages:

Excellent response from the biotechnology sector in terms of providing a research environment and participating in the implementation of study activities. Staff scholarships for doctoral students have also improved.

Shortcomings:

Economic resources are limited, as are resources dedicated to industry collaboration. Relatively few suitable businesses in the area.

Scope for improvements:

Improved collaboration with industry and joint activities with other research and medical centres in the region.

Cognitive Language Sciences

Advantages:

The study program provides promising career development opportunities in areas related to the analysis or regular use of language structure in modern life, such as the problem of machine translation and machine communication, scientific support for speech therapy or therapy for language disorders in the clinical setting, or scientific justification of modern pedagogical second language teaching practitioners.

Shortcomings:

We require a clearer or more distinct identification of potential points of common interest with potential industrial partners, the development of joint training programs, and cooperation in program implementation.

Scope for improvements:

It is still necessary to develop program application components that will allow our students to work with industrial partners in new ways.

9. 4 SITUATIONAL ANALYSIS AND ORIENTATIONS 2018/2019

Environmental Sciences

Advantages:

We continued our policy of development activities and applied research in the 2018/2019 academic year, as outlined in previous periods. We encourage or follow the recommendations of the relevant ministry in the program and in practice, which recommends closer links between the industry and other end-users on the one hand and the University as the carrier of the educational process on the other. Students benefit from such collaboration as well, as they have a better chance of a successful career, especially those looking for work outside the academic sphere after graduation.

Shortcomings:

So far, this practice has been successful. Thus, we did not notice any perceived shortcomings. Doctoral students who complete their studies are either already employed (economy) or find employment quickly.

Scope for improvements:

We see an improvement in the situation, particularly in increased cooperation with the economy and administrative services, both as a result of the possibility of joint projects, professional advice, and the increased possibility of hiring new Doctors of Science.

Physics

Advantages:

We believe that the industrial cooperation of research activities covered in the study program Physics is exemplary and, when compared to the previous academic year, has been improved by applying for joint projects for the employment of young Doctors of Science with several economic entities.

Shortcomings:

We did not notice any perceived shortcomings.

Scope for improvements:

We want to expand our collaboration with high-tech companies, both for the possibility of joint projects and thus additional funding, and for increased employment opportunities for new Doctors of Science.

Karstology

Advantages:

In addition to the basic study guidelines, there are several useful research opportunities for students in the context of their doctoral dissertations: some are useful for the further development of karst science, contain new knowledge and data, and are also useful for related sciences (geomorphology, hydrogeology, geology, biology, ecology, physics), whereas others can be directly useful, such as learning about the transfer of pollutants into the karst interior (important for the protection of karst water and the preparation of regulations for protection), protection and appropriate arrangement of tourist caves, assessment of the condition of the karst surface and underground. Specifically, we are linked to all state and leading foreign institutions that are in any way related to the karst.

Shortcomings:

We did not notice any shortcomings.

Scope for improvements:

We are not planning changes.

Humanities

Advantages:

Students can transfer and expand their knowledge in a cross-border setting.

Shortcomings:

Lack of awareness of cross-border employment opportunities.

Scope for improvements:

Connect with Italian institutions. We have recently strengthened our collaboration with the Slovenian Research Institute in Trieste (SLORI) and acquired the cross-border

project EDUKA2, in which our doctoral student also participated. We also expanded our collaboration with the Friulian Research Institute in Udine (Friuli Philological Society) and the Trieste National and Study Library (which also employs Doctors of Science in the humanities and social sciences). In 2019, we began working with the ICM of Gorizia (Istituto per gli Incontri Culturali Mitteleuropei).

Cultural Heritage Studies

Advantages:

Cooperation is also satisfactory in 2018/19. This year's main research activity was primarily carried out within the framework of both HORIZON2020 projects. The majority of students already have significant professional experience and a solid foundation for enrolment, which is successfully enhanced and mutually supplemented by research activity in the program.

Shortcomings:

This year, despite the involvement of a wide range of economic and social sectors through EU projects, a significant drop in enrolment prevented the desired participation and involvement of students.

Scope for improvements:

Significant increase in enrolment and continuation of work to obtain EU research projects.

Molecular Genetics and Biotechnology

Advantages:

Excellent response from the biotechnology sector in terms of providing a research environment and participating in the implementation of study activities. Staff scholarships for doctoral students have also improved.

Shortcomings:

Economic resources are limited, as are resources dedicated to industry collaboration. Relatively few suitable businesses in the area.

Scope for improvements:

Improved collaboration with industry and joint activities with other research and medical centres in the region.

Cognitive Language Sciences

Advantages:

We have good connections with schools and grammar schools in the Gorizia region as a result of frequent collaboration in the framework of experimental research in the field of cognitive language sciences.

Shortcomings:

To strengthen the program's applicative direction, we need a better connection with companies that develop various language technologies and devices, as well as institutions that deal with the publication of materials, such as books for multilingual children.

Scope for improvements:

It is still necessary to develop program application components that will allow our students to work with companies in new ways. The Multilingualism Centre has a lot of potential for developing public advisory activities on multilingualism, such as explaining different aspects of multilingualism to parents, teachers, and so on.

10. INDIVIDUAL RESEARCH WORK OF STUDENTS

10.1 PRESENTATION OF STUDENTS' RESEARCH WORK

Students participate in research projects and programs run by the University of Nova Gorica or other research institutions with which we have mostly signed cooperation agreements. Some students are also involved in international projects.

Environmental Sciences

The Laboratory for Environmental and Life Sciences, which is the primary holder of research activities involving students from the postgraduate program Environmental Sciences, has established successful cooperation at the regional, national, and international levels, as evidenced by numerous cooperation agreements through which it promotes cooperation with other higher education institutes, companies, organisations, and professional associations, as well as other important stakeholders in the environment. They are also included in the framework of research programs and applied projects at the National Institute of Biology, where several students are trained through the Young Researchers program.

The following are the topics of research projects in which students from the postgraduate study program Environmental Sciences participated:

- Analytics and chemical characterization of materials and processes, research program P1-0034, Research Agency of the Republic of Slovenia,
- Development of materials by sol-gel procedures and their use in systems for the exploitation of unconventional energy sources Acronym SG-MAT-S, research program P1-0030, Research Agency of the Republic of Slovenia,
- Associations, relations and communications in ecosystems, Research program P1-0255, Research Agency of the Republic of Slovenia,
- Advanced materials for a low-carbon and sustainable society, research program P1-0393, Research Agency of the Republic of Slovenia,
- Forest biology, ecology and technology, research program P4-0107, Research Agency of the Republic of Slovenia,
- Coastal Sea Research, Research Program P1-0237, Research Agency of the Republic of Slovenia.

Physics

Individual research projects are carried out by students in the Laboratories for Organic Physics, Materials Research, Quantum Optics, the Centre for Astrophysics and Cosmology, and the Centre for Atmospheric Research. Laboratories and the Centre have established local, national, and international collaboration. This is reflected in a number of international bilateral and multilateral projects, industrial projects, and core projects.

The following are research and development programs and projects whose leaders are also holders study content in the postgraduate study program Physics.

Leading UNG organisation:

- Research program Astroparticle physics, 2015-2021, (Lecturer: Prof. dr. Samo Stanič from 1.1.2020),
- Research program Heterogeneous processes on solid surfaces for sustainable technologies, 2019-2024, (Lecturer: prof. dr. Matjaž Valant),
- Basic research project "New detectors and techniques for remote sensing of atmospheric properties for the fields of Cherenkov telescopes", 2018-2021, (Lecturer: prof. dr. Samo Stanič),
- Basic research project "Transient source astronomy in the age of whole-sky surveys", 2017-2020, (Lecturer: prof. dr. Andreja Gomboc),
- Basic research project "Preparation for the search for dark matter with the Cherenkov Telescope Array Observatory using machine learning", 2019-2022, (Lecturer: prof. dr. Gabrijela Zaharijas),
- Basic research project "A New Age in the Study of High-Energy Astrophysical Transients", 2020-2023, (Lecturer: prof. dr. Andreja Gomboc).

UNG as a participating organisation:

- Research program Research of atoms, molecules and structures with photons and particles, 2004-2021, (Lecturer at UNG: prof. dr. Iztok Arčon),
- Nanoporous Materials Research Program, 1999-2025, (Lecturer at UNG: dr. Nataša Zabukovec Logar),
- Basic research project "Identification of cosmic ray sources between active galaxies with jets", 2019-2022, (Lecturer at UNG: prof. dr. Sergey Vorobyev).

Industry projects:

- Institute CES, Inštitut znanosti in tehnologije d.o.o., Production of a working prototype related to the process of storing electricity in solids,
- Seven Refractories d.o.o., Performance of thermogravimetric analysis of dTGA O₂,

International projects:

- Research project at PETRA III synchrotron, DESY, Hamburg Germany (project: I-20200036 EC, In-situ Fe K-edge XAS analysis of ionic species in the highly concentrated FeCl₂ aqueous solution for energy storage technology), 2019-2020, project leader for UNG: prof. dr. Iztok Arčon,
- Research project at Elettra synchrotron, Trieste (project 20185092, In-situ XAS analysis of thermo- and combined photothermo-catalytic CH₄ and CO₂ conversion to syngas over Ni-Rh / CeO₂-TiO₂ catalysts, 2019-2020, UNG project leader: prof. dr. Iztok Arčon,
- Research project at the Elettra synchrotron, Trieste (project: 20197108, "Characterization of bi-functional (Ni / Al) -zeolite catalysts for vapor-phase catalytic hydrogenation of Levulinic Acid Conversion to gamma-Valerolactone"), 2019-2020, project leader for UNG: prof. dr. Iztok Arčon,

- Research project at the Elettra synchrotron, Trieste (project: 2019-2020, Understanding the electrochemical mechanism and performance of calcium-sulphur batteries), 2019-2020, project leader for UNG: prof. dr. Iztok Arčon,
- H2020-SPACE: "High Energy Rapid Modular Ensemble of Satellites, Scientific Pathfinder (HERMES-SP)", INAF (National Institute for Astrophysics, Italy), 2018-2020, UNG project leader: prof. dr. Andreja Gomboc,
- European Space Agency (ESA) Prodex Project, "Gaia Transients", 2018-2020, project leader for UNG: prof. dr. Andreja Gomboc,
- EU COST Actions:
 - "Quantum gravity phenomenology in the multi-messenger approach" (2019-2023), project leader for UNG: prof. dr. Gabrijela Zaharijas,
 - "Gravitational waves, black holes and fundamental physics" (2017-2021), project leader for UNG: prof. dr. Andreja Gomboc,
- "PHAROS: The multi-messenger physics and astrophysics of neutron stars" (2017-2021), project leader for UNG: prof. dr. Andreja Gomboc,
- "Revealing the Milky Way with Gaia" (2019-2023), project leader for UNG: prof. dr. Andreja Gomboc,
- INTERREG Slo-IT, Nano-region: open network for innovation based on nanotechnologies, 2019-2022, Project leader for UNG: prof. dr. Mattia Fanetti.

Karstology

Doctoral students in Karstology can participate in research and applicative projects at ZRC SAZU and UNG's Laboratory for Environmental and Life Sciences:

- Terrestrial carbonates: mineral products of geobiological processes in the critical zone (J1-9185 (C) - Holder ZRC SAZU,
- Analytics and chemical characterization of materials and processes P1-0034 (C).

Students participate in domestic and international research and application projects that are implemented and managed by the partner Institute for Karst Research ZRC SAZU, with whom UNG has signed a long-term cooperation agreement for the implementation of this doctoral program and the provision of both course holders and mentors to doctoral students, and the opportunities for students to conduct research as part of their research projects at the Institute for Karst Research ZRC SAZU.

Domestic projects of the Institute for Karst Research ZRC SAZU

- Exploring the karst
- Natural and cultural heritage
- Karst research for the sustainable use of the Škocjan Caves as a world heritage site
- Emerging microbial pathogens of olms (*Proteus anguinus*), endemic troglobiont amphibians
- Methodology for the control of sustainable use of tourist caves with automatic measurements - an exemplary example - Postojna Cave
- Terrestrial carbonates: mineral products of geobiological processes in the critical zone

- Infiltration processes in forested karst aquifers under changing environmental conditions
- Defining the ecohydrological dynamics of Lake Cerknica with an interdisciplinary research approach
- Characterization of karst aquifers on a regional and local scale; the example of the hinterland of the Malni water source
- The concept of interdependence in the karst: the connection of sinkholes and caves in terms of anthropogenic influences
- Ecohydrological study of spatial-temporal dynamics in karst critical zones in different climatic conditions
- Research to determine the pollution of underground caves at the level of Slovenia, their priority remediation and monitoring of the condition of caves
- Research to identify and prevent pollution of the catchment area of Jelševniščica and Otovec, with special regard to the habitat of olms (HaČloRi)
- Activities for the establishment and sustainable development of the Cross-Border Geopark in the Karst
- Collection, processing and verification of cave data and their communication
- Public authorization for the preparation of expert geological bases and analyses as part of the monitoring of geological phenomena and monitoring of groundwater status
- Professional supervision and consulting in the management of cave systems
- Climatic and biological monitoring of cave systems
- Karstological supervision in the construction of the second track on the Divača-Koper railway line
- Preparation of environmental, investment and other documentation in the process of national spatial planning for the new double-track railway line Divača - Koper
- Hydrogeological part of groundwater monitoring for the non-hazardous waste landfill Stara vas - Postojna
- Establishment of a monitoring system for the purpose of defining the carrying capacity and tourist use of the Cerovac Caves
- Monitoring the condition of stromatolite stalagmites, tourist use and infiltrated water in the Škocjan Caves
- Monitoring of the state of lampenflora on stalactites and trails and regular monitoring in the Škocjan Caves
- Monitoring the status of habitat types from the Habitats Directive - detailed analysis of the Reka River in the Škocjan Caves Park
- Preparation of the Expert Karst Opinion for the needs of the preparation of the OPPN for the southern bypass of the city of Sežana

International projects of the Institute for Karst Research ZRC SAZU

- ENVRI-FAIR: ENVironmental Research Infrastructures building Fair services Accessible for society, Innovation and Research
- eLTER PLUS
- eLTER PPP

- EPOS-SP
- Development of research infrastructure for the international competitiveness of the Slovenian RDI area - RI-SI-EPOS
- Development of research infrastructure for the international competitiveness of the Slovenian RDI area - RI-SI-LIFEWATCH
- Evaluation of vulnerability estimates of karst water resources using numerical modelling
- Cave meteorology as an important tool for understanding natural and anthropogenic impacts on caves
- Book on the occasion of the International Year of Caves and Karst 2021-IYCK 2021 entitled "Karst, Caves and People"
- IGCP UNESCO Project No. 661 - Critical areas in karst systems

Humanities

- We exist only with others (applicative • 13 May 2016 - 30 September 2021)
- BEST - Promoting entrepreneurial skills as a tool for integrating migrants into the labour market (applicative • 1 February, 2019 - 31 July, 2021)
- Mitigating the effects of brain drain and strengthening the mechanism of brain circulation (research • 1 November, 2019 - 31 October, 2021)

Cultural Heritage Studies

In 2019/20, student involvement took place mainly within the European projects Horizon2020:

- CLIC / *Circular models Leveraging Investments in Cultural heritage adaptive reuse*
- URBiNAT/ *Healthy Corridors as drivers of social housing neighbourhoods for the co-creation of social, environmental and marketable NBS*
- Involvement in the international initiative Our World Heritage
- Involvement in research initiatives of the European University Network for the Implementation of the European Landscape Convention/UNISCAPE

Involvement of students in research work in cooperation with the IUAV University:

- Involvement of students in Cluster's research activities "HeModern/Heritage XX: Preservation of cultural heritage of the 20th century"
- Students were involved as part of a joint mentorship with the IUAV University of Venice and the Paris I University of Paris, La Sorbonne.

Molecular Genetics and Biotechnology

Students in the postgraduate program Molecular Genetics and Biotechnology work on research projects with the Laboratory of Environmental and Life Sciences, the Centre for Wine Research, Bia Separations d.o.o., and the International Centre for Genetic

Engineering and Biotechnology (ICGEB) in Trieste, with whom we have a collaboration agreement.

UNG projects involving students in 2020/21:

Domestic:

- N4-0046; ARRS-FWO; Identification of recombinant nanobody for immune detection of exosomes for the diagnosis of breast cancer (2016 - 2020), Research Agency of the Republic of Slovenia, project leader: Ario de Marco
- J4-9322; Development of reagents for diagnostic stratification and targeted treatment of breast cancer based on fluid biopsies (2018-2020); Research Agency of the Republic of Slovenia, project leader: Ario de Marco
- P4-0107; Forest biology, ecology and technology, ARRS Program, project leader: Ario de Marco

International:

- Transnational ERA-NET ArimNet2 project / Transnational ERA-NET ArimNet2 project "EnViRoS" *: Opportunities for an Environmental-friendly Viticulture: optimization of water management and introduction of new Rootstock and Scion (2017-2020), Coordinator: University of Udine, Italy/MIZS - Ministry of Education, Science and Sport. UNG Project leader: Lorena Butinar Interreg cross-border EU project "* AGROTUR II *: Karst agritourism" (2017-2019) / Cross-border co-operation Program Italy-Slovenia 2014- UNG Project Manager: Lorena Butinar

Projects at other institutions:

- Methods for virus in DNA purification using innovative chromatography methods (Bia Separations, d.o.o.)
- Research projects in the fields of bio-informatics, microbiology and biotechnology at ICGEB.
- Research projects in the field of development of new biosensors for the detection of therapeutic antibodies in the blood (Ulisse Biomed).

Cognitive Language Sciences

Students perform individual research work within the Centre for Cognitive Language Sciences.

- During the 2020/21 academic year, one student in the first year of the program was included in the project group of the joint Swiss-Slovenian research project: "More than a match: How speakers assign syntactic properties in real time" funded by the ARRS (N6-0156).
- One student was involved in research work as a young researcher within the research program "Theoretical and Experimental Linguistics".

Materials

Students of the Materials program are involved in the programs and projects of mentors at UNG, the Institute of Chemistry and the Jožef Stefan Institute.

Students participated in the following programs and projects in 2020/2021:

Domestic:

- Research program Heterogeneous processes on solid surfaces for sustainable technologies (from 1.1.2019), lecturer: prof. dr. Matjaž Valant,
- Research program Nanoporous materials (2020-2025), lecturer: prof. dr. Nataša Zabukovec Logar
- Research program P2-150 An integrated approach to preventing water pollution, 2020-2025, lecturer dr. Albin Pintar,
- Research program P2-0152 Chemical Reaction Engineering 2020-2025, lecturer prof. dr. Blaž Likozar
- Research Program Advanced Materials for a Low Carbon and Sustainable Society, 2015-2021,
- Project J2-1726 Thermocatalytic and combined thermo-photocatalytic reforming of CH₄ and CO₂ on nanoformed Ni/CeO₂ and PM-Ni/CeO₂-TiO₂ catalysts, 2019-2022, lecturer dr. Petar Djinović,

Industry projects:

- Institute CES, Inštitut znanosti in tehnologije d.o.o., Production of a working prototype related to the process of storing electricity in solids, (2019-2020)
- Sintol S.R.L.

International:

- European Research Council (ERC), 123STABLE, Towards Nanostructured Electrocatalysts with Superior Stability, (2020-2024),
- RHODOLIVE ERA NET COBIOTECH, Biovaluation of wastewater from olive mills to microbial lipids and other products, (2018-2021),
- ReaxPro H2020, Software Platform for Multiscale Modelling of Reactive Materials and Processes (2019-2023)
- NESTE

10. 2 SITUATIONAL ANALYSIS AND ORIENTATION 2020/2021

Environmental Sciences

Advantages:

Excellent opportunity to connect with domestic and foreign research institutions through institutional or personal connections.

Shortcomings:

They do not exist at the moment because students are eager to collaborate with other institutions both at home and abroad. COVID 19 is currently a partial restriction.

Scope for improvements:

Improvements are made more smoothly as a result of flexibility.

Timetable for making improvements or eliminating weaknesses:

As above - due to flexibility, improvements are made smoothly.

Physics

Advantages:

We believe that, as a result of the strong international involvement of laboratories and centres participating in the Physics study program, individual research work of students is at the very top of global research activities, as evidenced by their publications during the study in high-impact scientific journals.

Shortcomings:

This year, due to the Covid pandemic and despite all of the university's precautions, some students experienced research delays as a result of the university's several-month closure and ban on travel to other institutions.

Scope for improvements:

We see opportunities for improvement in increased financial resources for international student activities and student-designed research equipment.

Timetable for making improvements or eliminating weaknesses:

The timetable for the implementation of research work depends on the Covid situation. We apply for relevant international tenders throughout the year.

Karstology

Advantages:

The Institute for Karst Research ZRC SAZU, where the doctoral program was designed and developed, and where the doctoral program's main performers come from, is one of the world's karstology centres. The Institute's employees are involved in Slovenian and global karstology, as well as basic and applied karst research, on a daily basis. Students can participate in research in a variety of domestic and international research projects, as well as other karst-related activities. We believe that this is also one of the most important conditions for our students' success. Springer has already chosen five of our doctorates for publication as part of the Springer Theses, Recognizing Outstanding Ph.D. Research.

Shortcomings:

We did not notice any shortcomings in the previous academic year.

Scope for improvements:

Students may also benefit from additional international collaboration as a result of the appointment of a doctoral program as a UNESCO Chair on Karst Education (UNESCO Karst Studies Centre) and the subsequent acquisition of additional funding for students.

Timetable for making improvements or eliminating weaknesses:

Not required at this time.

Humanities

Advantages:

Due to the small groups, students have optimal support in their research work.

Shortcomings:

We would like to see more research projects in the humanities and social sciences in which doctoral students could be actively involved.

Scope for improvements:

Encouraging students to actively connect with professors from their research field both at home and abroad, as well as look for opportunities to participate in projects related to their research field, which will make it easier for them to find a job after graduation. Annual application of lecturers for domestic and foreign tenders for research projects. Visiting lectures from abroad (even if at a distance), which allows students to make contacts.

Timetable for making improvements or eliminating weaknesses:

Lecturers regularly apply for ARRS projects and other projects. Guest lecture: Expected January 2022. Responsible person: Program Director.

Cultural Heritage Studies

Advantages:

In 20/21, the situation was satisfactory within the framework of acquired research projects, as well as through participation in research projects/initiatives and training carried out at partner universities participating in the program's implementation.

Shortcomings:

We did not find any new shortcomings.

Scope for improvements:

Increase in enrolment.

Timetable for making improvements or eliminating weaknesses:

Promotion and greater visibility of all international mentors and experts as well as research projects offered by the CHS study (since 2022).

Strengthening cooperation with universities in China, where our former alumni are already employed.

Molecular Genetics and Biotechnology

Advantages:

Emphasized component of independent research work with annual performance evaluation and guidelines for further work. Opportunities for gaining experience in the international research community, exchange of research experience and scientific discussions. Concern for progress in UNG scientific excellence. Interdisciplinary projects.

Shortcomings:

Difficult regular monitoring of students' research work due to work at external institutions. Limited financial resources for research development. Difficult integration into the system of young researchers, as there is no doctoral program at UNG.

Scope for improvements:

Establishment of a system of tutors for better monitoring of research work. Involvement of mentors in the annual evaluation of research work. More research scholarships and more successful acquisition of research projects. Acquisition of a research program. The situation in the field of obtaining research funds has improved in recent years.

Timetable for making improvements or eliminating weaknesses:

The director and mentors will actively work to secure a research program in 2022 that will provide a suitable long-term environment for doctoral students' work. They will also apply for tenders for ARRS projects and foreign projects.

Cognitive Language Sciences

Advantages:

Individual research work is carried out by students in the program in close collaboration with mentors, who ensure a high level and quality of student research. Students must publish at least one article in the field of cognitive language sciences and present their work at national and international conferences and symposia until the presentation of the dissertation.

Shortcomings:

During the current academic year, student individual research work was hampered significantly by restrictions on staff mobility caused by the spread of the new coronavirus. This had the most impact on the experimental work involving the testing of participants in linguistic experiments.

Scope for improvements:

Increased funding for student scholarships will benefit the program, allowing it to attract new generations of talented students interested in research work around the world. We intend to include more doctoral students in research project groups in the future, providing more opportunities for co-financing doctoral studies.

Timetable for making improvements or eliminating weaknesses:

In terms of improvements, they will be adapted to the announcements of future ARRS tenders for research projects as well as those of other domestic and foreign research funding agencies.

10. 3 SITUATIONAL ANALYSIS AND ORIENTATIONS 2019/2020

Environmental Sciences

Advantages:

In 2019/2020, students carried out individual research work within the framework of domestic research programs and projects at UNG and participating institutions, as well as within international and bilateral projects. Most students completed their projects as part of the MR program. This type of collaboration also allows them to use more research equipment. Students have access to this as well, thanks to contracts and joint investments made by UNG with other Slovenian research institutions. The situation changed dramatically at the start of 2020, when students were unable to perform certain laboratory or field activities within the time or scope allotted due to the COVID-19 epidemic.

Shortcomings: There were no major shortcomings.

Scope for improvements:

Minor improvements are constantly taking place within individual research groups in which individual doctoral students work.

Physics

Advantages:

We believe that, as a result of the strong international involvement of laboratories and centres participating in the Physics study program, individual research work of students is at the very top of global research activities, as evidenced by their publications during the study in high-impact scientific journals.

Shortcomings:

This year, due to the Covid pandemic and despite all of the university's precautionary measures, some students experienced research delays, particularly those who had to perform laboratory tasks in other institutions.

Scope for improvements:

We see opportunities for improvement in increased financial resources for international student activities and student-designed research equipment.

Karstology

Advantages:

The Institute for Karst Research ZRC SAZU, where the doctoral program was designed and developed, and where the doctoral program's main performers come from, is one of the world's karstology centres. The Institute's employees are involved in Slovenian and global karstology, as well as basic and applied karst research, on a daily basis. Students can participate in research in a variety of domestic and international research projects, as well as other karst-related activities. We believe that this is also one of the most important conditions for our students' success. Springer has already chosen five of our doctorates for publication as part of the Springer Theses, Recognizing Outstanding Ph.D. Research.

Shortcomings:

We did not notice any shortcomings in the previous academic year.

Scope for improvements:

Students may also pursue additional international collaboration by appointing a doctoral program for the UNESCO Chair on Karst Education and, as a result, obtaining additional funding.

Humanities

Advantages:

Due to the small groups, students have optimal support in their research work.

Shortcomings:

We would like to see more research projects in the humanities and social sciences in which doctoral students could be actively involved.

Scope for improvements:

Encouraging students to actively connect with professors from their research field both at home and abroad, as well as look for opportunities to participate in projects related to their research field, which will make it easier for them to find a job after graduation. Annual application of lecturers for domestic and foreign tenders for research projects. Visiting lectures from abroad (even if at a distance), which allows students to make contacts.

Cultural Heritage Studies

Advantages:

With the acquisition of consistent and long-term research projects in recent years, the situation has gradually improved. Furthermore, senior students conduct research through participation in domestic and international research projects, which are also carried out at a number of partner universities involved in the program's implementation.

Shortcomings:

Low enrolment.

Scope for improvements:

Improve enrolment significantly and ensure consistency in obtaining research funding.

Molecular Genetics and Biotechnology

Advantages:

Emphasized component of independent research work with annual performance evaluation and guidelines for further work. Opportunities for gaining experience in the international research community, exchange of research experience and scientific discussions. Concern for progress in UNG scientific excellence. Interdisciplinary projects.

Shortcomings:

Difficult regular monitoring of students' research work due to work at external institutions. Limited financial resources for the development of research activities and access to laboratories at UNG. Difficult integration into the system of young researchers, as there is no doctoral program at UNG.

Scope for improvements:

Establishment of a system of tutors for better monitoring of research work. Involvement of mentors in the annual evaluation of research work. More research scholarships and more successful acquisition of research projects. Acquisition of a research program. With the expansion of the research program and the addition of new research projects, the situation in obtaining research funds improved in 2019/2020.

Cognitive Language Sciences

Advantages:

Students have been closely involved in research work in areas that are strongly represented at the Centre for Cognitive Language Sciences, where the majority of the local lecturers participate in the program, since the beginning of their studies. Such involvement in students frequently results in outstanding scientific achievements both during the course of study and during the dissertation writing process.

Shortcomings:

Problems with financial support for students, limited opportunities to finance tuition fees.

Scope for improvements:

We believe that increasing the involvement of doctoral students in domestic and international research projects, as well as increasing the possibility of funding under the young researcher's scheme, is one way to improve funding sources.

10. 4 SITUATIONAL ANALYSIS AND ORIENTATIONS 2018/2019

Environmental Sciences

Advantages:

In 2018/2019, students carried out individual research work within the framework of domestic research programs and projects at UNG and participating institutions, as well as within international and bilateral projects. Most students completed their projects as part of the MR program. This type of collaboration also allows them to use more research equipment. Students have access to this as well, thanks to contracts and joint investments made by UNG with other Slovenian research institutions. The situation has not changed significantly compared to the previous year.

Shortcomings:

We did not notice any major shortcomings in 2018/2019.

Scope for improvements:

Minor improvements could take place within individual research groups in which individual doctoral students work.

Physics

Advantages:

We believe that, as a result of the strong international involvement of laboratories and centres participating in the Physics study program, individual research work of students is at the very top of global research activities, as evidenced by their publications during the study in high-impact scientific journals.

Shortcomings:

We did not notice any significant shortcomings in this academic year.

Scope for improvements:

We see opportunities for improvement in increased financial resources for international student activities and student-designed research equipment.

Karstology

Advantages:

The Institute for Karst Research ZRC SAZU, where the doctoral program was designed and developed, and where the main executors of the doctoral program come

from, is one of the worlds karstology centres, with daily involvement in Slovenian and global karstology and basic and applied karst research. Students can participate in research in a variety of domestic and international research projects, as well as other karst-related activities. We believe that this is also one of the most important conditions for our students' success. Springer has already chosen three of our doctorates for publication as part of the Springer Theses, Recognizing Outstanding Ph.D. Research.

Shortcomings:

We did not notice any shortcomings in the previous academic year.

Scope for improvements:

Students may also pursue additional international collaboration following the appointment of a doctoral program for the UNESCO Chair in Karst Education and the subsequent acquisition of greater financial resources.

Humanities

Advantages:

Due to the small groups, students have optimal support in their research work.

Shortcomings:

We would like to see more research projects in the humanities in which doctoral students could be actively involved.

Scope for improvements:

Encouraging students to actively connect with professors from their research field both at home and abroad, as well as look for opportunities to participate in projects related to their research field, which will make it easier for them to find a job after graduation. Annual application of lecturers for domestic and foreign tenders for research projects. Visiting lectures from abroad, which allows students to make contacts.

Cultural Heritage Studies

Advantages:

With the acquisition of consistent and long-term research projects in recent years, the situation has gradually improved. Furthermore, senior students conduct research through participation in domestic and international research projects, which are also carried out at a number of partner universities involved in the program's implementation.

Shortcomings:

Enrolment was almost non-existent in 2018/19.

Scope for improvements:

Improve enrolment significantly and ensure consistency in obtaining research funding.

Molecular Genetics and Biotechnology

Advantages:

Emphasized component of independent research work with annual performance evaluation and guidelines for further work. Opportunities for gaining experience in the international research community, exchange of research experience and scientific discussions. Concern for progress in UNG scientific excellence. Interdisciplinary projects.

Shortcomings:

Difficult regular monitoring of students' research work due to work at external institutions. Limited financial resources for the development of research activities and access to laboratories at UNG. Difficult integration into the system of young researchers, as there is no doctoral program at UNG.

Scope for improvements:

Establishment of a system of tutors for better monitoring of research work. Involvement of mentors in the annual evaluation of research work. More research scholarships and more successful acquisition of research projects. Acquisition of a research program.

Cognitive Language Sciences

Advantages:

Since the beginning of their studies, students' active participation in research work at the Centre for Cognitive Language Sciences has been regarded as a clear advantage of the doctoral program.

Shortcomings:

Inadequate funding for student research continues to prevent the program from recruiting a larger number of students who could benefit from the program's strong research potential.

Scope for improvements:

We strive to provide additional funding sources for doctoral students.

11. SUMMARY

The Graduate School integrates and oversees all postgraduate doctoral study programs at the University of Nova Gorica, regardless of their field of study. The scope is broad, encompassing everything from science and technology to the humanities and interdisciplinary sciences. In the 2020/2021 academic year, the University of Nova Gorica implemented eight third-level doctoral programs prepared in accordance with the Bologna Declaration (*Environmental Sciences, Karstology, Physics, Humanities, Cultural Heritage Studies, Molecular Genetics and Biotechnology, Cognitive Language Sciences and Materials*). This year, 60 students were enrolled in all study programs. The number of foreign students decreased slightly (46%), which is at least partly due to the difficulty of student mobility during the Covid-19 pandemic. Due to the Covid-19 pandemic, there were also fewer foreign student exchanges, but we expect the number of exchanges to increase as early as next academic year. Internationalization of postgraduate studies will continue to be one of the Faculty's most important strategic orientations in the future.

The Graduate School will continue to adhere to the established vision of integrating all doctoral study programs at the University of Nova Gorica into a single faculty. This decision has proven to be good and effective, as a connected and unified postgraduate faculty allows for a great deal of flexibility and interdisciplinarity in the design of individual doctoral study programs. Interchangeability with related study programs at other universities in Slovenia and abroad is also possible thanks to the European credit system ECTS and the ERASMUS + program, which provides students with great mobility. All study programs at the Graduate School share a close relationship with research units at the University of Nova Gorica and other research institutions both at home and abroad. Postgraduate students can conduct research as part of their studies and participate in international research projects in these laboratories. Students, in collaboration with professors, researchers, and experts, can effectively create new knowledge and apply it in the business environment.

Data on student success in both study and individual research work demonstrate that all programs are implemented successfully, with quality and efficiency. The average grades of students are very high, exams are usually passed in the first attempt, and the average period of study is shorter. The success of postgraduate studies is also reflected in the successful presentation of high-quality doctoral dissertations and the numerous publications of student research results in prestigious international journals: 61 scientific and professional articles, 9 published conference papers, 68 published conference abstracts, and 13 other publications in 2020 and 2021. This figure excludes publications by students who have recently completed their studies but are still publishing works related to their research in the context of doctoral and master's theses. The University of Nova Gorica promoted nine Doctors of Science in the 2020/21 academic year. The commission for the presentation of the doctoral thesis always includes at least one member from a foreign university (from 2019 onwards at least two members from foreign universities), ensuring that the quality of doctoral theses is comparable to global standards. These achievements undoubtedly attest to the high quality and relevance of the content and teaching methods available in our postgraduate study programs.

Environmental Sciences

We enrolled the eleventh generation of students in the third-level Environmental Sciences program in 2020/2021. The recent trend of relatively low enrolment has continued this academic year. There were nine students enrolled, two of whom were first-year students. Foreign students are also present among the students (Nigeria, Ukraine, Tunisia). One student completed their studies in the Environmental Sciences program during the previous academic year. The average length of study was 5.25 years, which was slightly longer than the UNG Graduate School average. The transition between years was 88.33%. Current students are largely funded by the ARRS and thus committed to meeting contractual deadlines, but their study period has been extended by one year as a result of the Covid-19 pandemic. This also affected the length of studies in the last year. The spatial conditions are regulated and meet the needs for the implementation of the postgraduate study program Environmental Sciences. Due to the Covid-19 pandemic in 2020, the teaching method was completely changed to a distance learning system (ZOOM, MiTeam, Moodle, .).

Physics

Physics is a third-level study program that is implemented in blocks of individual courses (intended for lectures and exams). Depending on the number of students, the courses are delivered as one- to four-week intensive courses in which the content of the courses is delivered in the lecture hall, individually with contact hours with the lecturer, or as individual distance learning. In addition to organised content, students' study obligations include mandatory seminars and individual research work. Students may also take exams in other doctoral study programs at UNG and related programs at other universities in Slovenia and abroad, with the approval of the mentor and the program's scientific council. In addition to pedagogical exchange, the method of study allows students to conduct research at a variety of domestic and international universities and research institutes. Despite the Covid-19 pandemic, we managed to complete lectures and laboratory exercises, as well as most of the research work.

Karstology

During the previous academic year, work with students was organised as individual work in accordance with the adopted program, with almost all lecturers participating. Despite the global epidemiological situation (COVID-19), we completed the academic year without incident. We also communicated with the students via various web links, phone calls, and e-mail. Students' work was not hampered by the partially limited field work during the previous academic year, and they were able to progress to the following years.

The lecturers are established researchers both at home and abroad, with extensive experience in basic research as well as industry-relevant applicative work. Teachers provide students with new knowledge and experience, which they gain through their work outside of the research institution. One student enrolled in the first year. Six students were enrolled, and they passed the exams with an average grade of 9.92. Students have been unable to physically attend international scientific meetings over the last year. Furthermore, karstology lecturers were unable to travel to universities and institutes around the world to actively participate in professional meetings and research. Only part of the planned lectures were conducted via web links. The program has established collaboration with many

foreign universities, and foreign experts serve as mentors and commission members for our students. We are stepping up our efforts to carry out the planned knowledge transfer to Asian students at Yunnan University's Slovenian-Chinese International Karst Environmental Laboratory (Yunnan International Karst Environmental Laboratory) (Kunming, China). In June 2014, UNESCO recognized our research as exceptional in the world and signed an agreement with UNG to establish the UNESCO Chair on Karst Education (UNESCO Karst Studies Centre), enhancing the program's value even further.

Humanities

The implementation of the postgraduate study program Humanities in 2020/2021 took place as expected, mostly in a distance learning form. The study program was implemented in the form of regular lectures by lecturers, seminar work and individual consultations. The emphasis was on interdisciplinarity, comparativeness, and the historical, social, and political contextualization of problems. Due to the Covid-19 epidemic, male and female students had constant access to professors and program directors, albeit mostly remotely.

Cultural Heritage Studies

One student completed a joint one-year improvement program in 2020/2021. (Second level master ETCAEH). International research collaboration has already occurred through EU projects Horizon2020, CLIC, and URBiNAT, as well as through international collaboration with the university network UNISCAPE. We have also enriched our offer by cooperating with the international initiative of the Our World Heritage network. Most of the lectures were conducted remotely via the online educational platform UNG MiTeam.

Molecular Genetics and Biotechnology

The study program is successfully implemented in accordance with the accredited program. The emphasis is particularly on experimental laboratory work, which serves as the foundation for a successful doctoral thesis. We used modern learning and teaching methods in order to encourage future Doctors of Science to achieve better learning outcomes, such as: a precise understanding of the scientific approach in the field of biosciences; the development of independent thinking and critical appraisal; and the development of personal responsibility and decision-making skills. Due to the exceptional epidemiological situation in 2021, we actively implemented the distance learning method. We organised a variety of scientific activities, such as lectures and educational seminars, in addition to laboratory work. We obtained additional research funds this year, which will provide funding sources as well as a research environment for future doctoral students.

During the academic year 2020/2021, all students progressed in accordance with the program. Following a study interruption, one student was permitted to continue her studies and enrol in the third year.

Cognitive Language Sciences

In the academic year 2020/2021, the Cognitive Language Sciences study process consisted of mandatory lectures, elective courses, and individual research work. Due to the epidemiological situation, we actively implemented the distance learning method. Two new students enrolled in the 1st year, and one student successfully completed his doctoral studies and presented his doctoral dissertation. This academic year, the program's staff

structure was appropriate. The program featured four external lecturers (three foreign and one domestic) during the 2020/2021 academic year. All students successfully completed the program based on their individual learning objectives.

Materials

The Materials program prepares students to work in research and industry by analysing, improving, and designing new materials for advanced devices and technologies. Their careers will be associated with the most difficult tasks in research institutes, universities, and industry development departments. 14 students enrolled in the Materials program during the 2020/2021 academic year advanced to the senior year with excellent grades.

12. GS QUALITY IMPROVEMENT ACTION PLAN

Ad 1) Ad 1) On 26 .11. 2019, a group of experts appointed by Slovenia's National Agency for Quality Assurance in Higher Education (SQAA) visited a higher education institution and prescribed activities as part of a sample evaluation of the third-level doctoral program **Cultural Heritage Studies**. SQAA's most recent positive assessment for extending the program's accreditation was adopted on 6. 1. 2017. The SQAA Council made some suggestions for program improvements, including the elimination of partial compliance with quality standards.

Action plan for the implementation of SQAA recommendations:

Changing and updating the study program

MEASURE 1: Encouraging students to increase mobility (proposed improvements)

Mobility at university level is carried out mainly in the context of Erasmus mobility. The study of cultural heritage (CHS) is a distinctly internationally oriented program, which provides students with additional opportunities for mobility: a contract for a double degree with the University of IUAV, a contract for a joint training program (IUAV from Venice), a co-mentoring contract (Poltecnico di Milano and Paris1-La Sorbonne), implementation of part of the study period at the international organisation ICCROM. The program also has a well-established practice of co-mentoring, which CHS implements with a diverse range of foreign mentors who are actively involved in the program's implementation. Most doctoral students have two mentors, at least one of whom is actively involved in research and teaching activities at a foreign home university, providing additional mobility opportunities. All students who completed the program participated in at least one form of mobility. As a result of the foregoing, we intend to strengthen student information about mobility opportunities, with the assistance of the UNG International Office, and thus more effectively encourage students to use the given mobility opportunities in the CHS program.

MEASURE 2: Re-examine the curricula for research work in the 3rd and 4th year, which have the same content, learning objectives and competencies (proposed improvements)

Curriculum improvements are currently underway and are expected to be approved by the UNG Senate in the 2021/2022 academic year.

MEASURE 3: Promoting students' scientific publications (proposed improvements)

Before presenting a doctorate, the GS rules require the publication of at least one scientific article. All doctoral students who successfully advanced to the senior years were actively involved in publishing scientific articles. New research projects will allow us to further involve students in the publications that are planned as a result of the research. The program's active participation in European thematic universities and professional networks and institutions such as UNISCAPE and ICCROM provides additional sources of

information as well as involvement in the publication of scientific and professional articles. We intend to encourage more regular transitions to higher years, i.e., transitions to scientific research contexts with competencies suitable for scientific publishing, in order to improve students' scientific publications.

Implementation of the study program

MEASURE 4: Separation between the one-year advanced improvement program and the doctoral study (partial compliance with standards)

The four-year doctoral study program "Cultural Heritage Studies/CHS" (240 ECTS) is in the tender for enrolment in UNG study programs in the academic year 2021/2022, which was approved by the UNG Senate at its regular 98th session on 11. 11. 2020, and is accredited by SQAA, announced separately from the one-year training program "Economics and Techniques for the Conservation of the Architectural and Environmental Heritage/ETCAEH" (60 ECTS), which is organised as a form of lifelong learning.

When presenting all study programs of the Graduate School UNG on the website:

SLO: <http://www.ung.si/sl/studij/fakulteta-za-podiplomski-studij/studij/>

ANG: <http://www.ung.si/en/study/graduate-school/study/>

the presentation of the one-year program "Economics and Techniques for the Conservation of the Architectural and Environmental Heritage/ETCAEH" (60 ECTS) is given separately from the presentation of the four-year doctoral study "Cultural Heritage Studies/CHS" (240 ECTS). It is clear from the web presentation that these are two different educational programs. It is also evident from the tender that the entries in these two programs are separate.

MEASURE 5: Registration of a one-year improvement program in SQAA (proposed improvements)

The one-year training program, implemented jointly with the IUAV University of Venice (Università IUAV di Venezia), is publicly valid by decision of the IUAV Senate. In Italy, the establishment of one-year study programs for improvement (known as the second level Master in Italy) is within the autonomy of a single university. The improvement study program was also approved by the IUAV for the 2020/2021 academic year.

MEASURE 6: Promotion of the program and increase of enrolment (proposed improvements)

UNG has adopted a joint strategy for the promotion of all faculties and study programs (including the Covid-19 period), which, in addition to previously established activities such as updating websites, inclusion in social networks, educational fairs and information days (including online), introduces online lectures and access to them for the domestic and foreign general public, as well as for domestic and foreign selected groups of graduates and high school students, as well as the introduction of an Instagram profile.

MEASURE 7: Restore the relationship between permanent staff and external experts (proposed improvements)

We have already improved the relationship between permanent employees and external experts by acquiring international research projects that provide us with additional employability. We intend to strengthen the relationship in the future by acquiring additional EU and domestic research projects, which will allow us to strengthen domestic experts' interest and involvement in internationally oriented research activities, which is, after all, a unique feature and advantage of the CHS study program.

Ad 2 In 2021, a group of experts appointed by the National Agency of the Republic of Slovenia for Quality Assurance in Higher Education (SQAA) paid two visits to the University of Nova Gorica and selected study programs as part of the accreditation process. Despite the fact that we are still awaiting the official evaluation document containing the SQAA Council's recommendations, we have already made some improvements in the 2020/2021 Self-Evaluation Report, which the group of experts highlighted in the oral final report of the UNG external evaluation and its programs.

MEASURE 1: In all "Situational analysis and orientations" chapters, the following must be addressed: "Advantages," "Shortcomings," and "Opportunities for Improvement" in the area under consideration. It is necessary to provide a timetable for implementing improvements or eliminating weaknesses from the previous year, as well as identify who is responsible for implementation. The "Situational analysis and orientations" in subsequent years should clearly show how the previous year's recommendations for improvements were implemented in the following year. These reports should detail all steps taken to implement improvements and address shortcomings, beginning with the identification of shortcomings and progressing to the proposal for rectification, the implementation timetable, and the final implementation report.

The Schedule for the implementation of improvements or elimination of shortcomings was introduced as a new section in all chapters of the "Situational analysis and orientations," in which program directors indicate the improvement plan, including the estimated time of implementation and the responsible person. The plan will be evaluated next year. If any of the planned activities for improving or eliminating shortcomings are not carried out, the reasons for this will be stated, as will the planned measures for implementation in the following year.

13. ANNEXES

ANNEX 1

LIST OF LECTURES

Environmental Sciences

- Research work I - seminars of doctoral candidates after the 1st year of research work - lecturer prof. dr. Anton Brancelj
- Research work II - seminars of doctoral candidates after the 2nd year of research work - lecturer prof. dr. Anton Brancelj
- Research work III - seminars of doctoral candidates after the 3rd year of research work - lecturer prof. dr. Anton Brancelj

- Research work IV- seminars of doctoral candidates after the 4th year of research work - lecturer prof. dr. Anton Brancelj
- Modern Trends in Environmental Sciences - seminars prid. prof. dr. Valentina Turk (coordinator)
- Selected Chapters in Water Pollution (prid. prof. dr. Valentina Turk)
- Individual consultations with doctoral mentors

Physics

- prof. dr. Gabrijela Zaharijas: Research work I, II and III, Seminar, 1st and 2nd semester
- prof. dr. Samo Stanič: Communication in Science, 2nd semester
- prof. dr. Sergey Vorobyev: Modern experimental methods in astroparticle physics, 2nd semester
- prof. dr. Mattia Fanetti: Surface Science, 2nd semester
- prof. dr. Mattia Fanetti: Laboratory of Scanning Electron Microscopy, 2nd semester
- doc. dr. Jon Paul Lundquist: Astroparticle physics, 2nd semester
- prof. dr. Sandra Gardonio, Selected topics in nanoscience, 2nd semester
- prof. dr. Artem Badasyan, Selected topics in biophysics, 1st and 2nd semester
- prof. dr. Iztok Arčon, Structural Analysis of Materials with X-ray Absorption and Emission Spectroscopy and Microscopy, 2nd semester,
- doc. dr. Miha Nemevšek, Contemporary particle physics, 1st semester
- prof. dr. Miha Založnik, Introduction to discretization methods, 2nd semester
- doc. dr. Primož Rebernik Ribič, Fundamentals of Free Electron Laser Operation, 1st semester
- prof. dr. Jože Grdadolnik, Selected Topics from Molecular Spectroscopy, 1st semester
- prof. dr. Nataša Zabukovec Logar, Crystallography, 1st semester
- prof. dr. Klemen Bergant, Atmospheric Physics, 2nd semester
- prof. dr. Fabrizio Nesti, Contemporary particle physics, 1st semester

Karstology

- In the 2020/2021 academic year, studies took place in the form of individual consultations combined with field work. Individual programs were conducted in accordance with agreements between lecturers, mentors and students. Despite the global health situation (COVID-19), we completed the academic year without incident.

Humanities

We conducted the following lectures at the doctoral study of Humanities:

- izr. prof. dr. Mirjam Milharčič Hladnik: Migrations and Creativity
- izr. prof. dr. Ana Toroš: Research seminar for senior students

Activities also took place as part of a research seminar for senior students.

Cultural Heritage Studies

In 2020/21, we conducted lectures on the online educational platform MiTeam:

- prof.dr. Xavier Greffe, *Economics of cultural heritage and creativity*
- prof.dr. Antonio Paolo Russo, *Cultural heritage tourism*
- prof.dr. Amy Strecker, *Cultural heritage, common goods and the law*
- prof.dr. Massimiliano Mazzanti, *The economic valuation of culture*
- prof.dr. Saša Dobričič (University of Nova Gorica), Jukka Jokilehto (University of York): *Contemporary trends in Cultural Heritage protection, planning and management*
- prof.dr. Luigi Fusco Girard, *Selected topics in Sustainability of heritage*
- prof.dr. Saša Dobričič, *Fundamentals of preservation of historic urban and cultural landscape*

Molecular Genetics and Biotechnology

- prof. dr. Radovan Komel: Fundamentals of Molecular Biology and Biotechnology, first semester
- prof. dr. Alessandro Marcello; Modern trends in molecular biology and biotechnology I, II and III, both semesters
- doc. dr. Martina Bergant Marušič, mentors: Research work I and II, both semesters
- doc. dr. Martina Bergant Marušič; Seminar I and II, second semester

Cognitive Language Sciences

- prof. dr. Artur Stepanov, Introduction to Psycholinguistics
- prof. dr. Franc Marušič, Introduction to Syntax
- doc. dr. Rok Žaucer: Seminar workshop I
- doc. dr. Marko Simonović, Introduction to phonology

- Research work I (under the guidance of a mentor)
- Research work II (under the guidance of a mentor)
- doc. dr. Toma Strle, Introduction to Cognitive Sciences
- prof.dr. Jacques Moeschler, Introduction to Semantics
- prof. dr. Franc Marušič and doc. dr. Rok Žaucer, Research seminar: Contemporary trends in syntax II
- doc. dr. Marko Simonović, Research seminar: Contemporary trends in phonology I
- prof. dr. Malte Zimmermann, Research Seminar: Contemporary trends in semantics and pragmatics I
- Dissertation (under the guidance of a mentor).

Materials

- prof. dr. Nataša Novak Tušar: Research work I, II and III, mentors, throughout the academic year,
- prof. dr. Sandra Gardonio: Seminar, 2nd semester,
- prof. dr. Matjaž Valant, Advanced Functional Materials and Solid State Chemistry, 2nd semester,
- prof. dr. Andrej Kržan, Current topics in polymer science, 2nd semester
- doc. dr. Petar Djinović, Materials as catalysts for hydrocarbon conversions, 1st and 2nd semester
- prof. dr. Najc Hodnik, Materials for electrochemical devices, 2nd semester,
- doc. dr. Miha Grilc, Multi-scale Materials Modelling and Engineering, 2nd semester,
- prof. dr. Goran Dražić, Transmission Electron Microscopy, 2nd semester,
- prof. dr. Samo Stanič, Communication in Science, 2nd semester
- prof. dr. Nataša Zabukovec Logar, Crystallography, 2nd semester
- prof. dr. Mattia Fanetti, Surface Science, 2nd semester
- prof. dr. Mattia Fanetti, Laboratory of Scanning Electron Microscopy, 2nd semester
- prof. dr. Jože Grdadolnik, Selected Topics from Molecular Spectroscopy, 1st semester
- prof. dr. Simona Golič Grdadolnik, High-Resolution Nuclear Magnetic Resonance, 2nd semester

ANNEX 2

SEMINARS OF GUEST LECTURERS

Environmental Sciences

Students attended seminars organised by the Laboratory of Environmental and Life Sciences.

25. 11. 2020 (MiTeam)

Dr. Tina Šantl Temkiv (University of Aarhus); The role of bioaerosols in cloud formation in the high Arctic

14. 4. 2021 (MiTeam)

Dr. Griša Močnik (Centre for Atmospheric Research, UNG); Source apportionment of air pollution: concentrations and effects.

2. 6. 2021 (MiTeam)

Dr. Milan Sýs (University of Pardubice); Electroanalysis of Pharmaceuticals in the Environment

30. 6. 2021 (MiTeam)

Dr. Michal Pawlak (Nicolaus Copernicus University, Poland); Measurement methods in the frequency domain and their application to the physical characterization of materials.

Physics

Student attendance is mandatory at seminars and Science Evenings. In the 2020/21 academic year, seminars were held online via Zoom.

7. December 2020

Dr. Marco Pandolfi, IDAEA-CSIC, Barcelona Aerosol particles chemical and physical properties characterization in the Western Mediterranean Basin,

21. 12. 2021

Dr. Samuel Weber, Institut des Géosciences de l'Environnement (IGE), Grenoble, France, spaSource apportionment of particulate matter and their oxidative potential

12. 4. 2021

Knarik Yeritsyan, Materials Research Laboratory, University of Nova Gorica, Pulling Polymers: Models and Experiment

27. 5. 2021

Dr. Chris Stoughton, Fermilab Cosmic Physics Centre, Fermilab g-2: Measuring the Anomalous Magnetic Moment of the Muon

11. 6. 2021

Luka Novinec, Elettra Sincrotrone Trieste, Italy and Laboratory of Quantum Optics,

University of nova Gorica, New concepts for generating few-femtosecond free-electron laser pulses in XUV spectral region

Karstology

Due to the pandemic, we were forced to hold a 27-year continuous and traditional congress, the 28th International Karst School "Classical Karst," remotely this year, which is the world's largest annual meeting of karstologists (14.-17 .6.). As invited lecturers, experts-karstologists from all over the world took part. Students from the Karstology program were also invited.

R. Watson: Connecting the dots - the inter-relationship between sinkholes, uvalas and conduits in evaporite karst at the Eastern Dead Sea shore, Jordan

V. Iurlii: Polycyclic speleogenesis and tectonics in Apulia (Italy), forty years later. A review and new data

T. Faulkner: The general model of cave development in the metalimestones of the Caledonide terranes

M. Todorović: The REE and trace elements in karst hydrogeothermal systems of Carpatho-Balkanides, Serbia

J. Tičar: Advanced approach in evaluating cave pollution in Slovenia

J. Stemberk: The role of gravitational movements and active tectonics in the Driny Cave development in the Malé Karpaty Mts. (the Western Carpathians)

G. Schindel: Emergency response strategies for hazardous materials releases in karst

T. Chen: Adapting to hazardous karst events with a novel machine learning approach

T. Stokes: What is needed for improving the reconnaissance karst potential mapping of British Columbia, Canada

M. Blatnik: Ice thickness measurements in ice caves using terrestrial LiDAR scanner; examples from Slovenia

P. Audra: Monitoring of Mescla karst spring in the French Southern Alps: a rare case of stratified waters out of coastal areas

M. Marinić: Significance and comparison of sediments of Northern Velebit deep caves, Dinaric karst, Croatia

V. Johnston: Cave air and water monitoring of moonmilk-containing caves

J. Obu: What can patterned ground in karst caves tell us about Arctic carbon cycle?

C. Mayaud, U. Novak & N. Ravbar: Dinaric karst of Notranjska region

RF Muhammad: Tidal karst notches as indication of Holocene sea levels in peninsular Malaysia

M. Kázmér: Coastal karst in Bali (Indonesia) describes repeated late Holocene seismic uplift

M. Surić: Croatian coastal karst - treasury of karst features, yet just a piece of the global jigsaw

A. Švara: Active water cave Vodna jama v Lozi and Loza Unroofed Cave - a case of morphogenesis in the Slavina Corrosional Plain (SW Slovenia)

W. Dreybrodt: Early hypogene carbonic acid speleogenesis in unconfined limestone aquifers: A model

A. Martín-Pérez: In situ formation of cryogenic calcite on seasonal ice in Snežna jama

R. Lončarić: Driving mechanisms and spatiotemporal variations of radon concentration in Modrič Cave (Croatia)

M. Breg Valjavec: Dolines - important soil organic carbon pools on Kras Plateau

LE Panisset Travassos: Research possibilities in the Tropical Karst: past, present and future

V. Gajović: Preliminary analysis of vadose zone water pulses from Postojna and Planinska jama drips, SW Slovenia

K. Voudouris: General characteristics of karst aquifers in Greece

N. Kalantari: Hydrochemical and stable isotope methods to determine karstic aquifers water circulation in the Izeh area, southwest of Iran

D. Gillieson: Geoheritage and conservation of karst on Kangaroo Island, South Australia

E. Gokkaya: Development and morphological evolution of bedrock-collapse sinkholes in the Sivas gypsum karst, Turkey

S. Bahadorinia: Karst in arid Central Region of Kerman Province, Iran

M. Švob: Water flow in karst soil: implementing preferential flows in one-dimensional model

D. Grozić: Large scale test of ALS LiDAR data utilization for cave entrance detection: a case study from the UNESCO World Heritage Site - Plitvice Lakes National Park, Croatia

J. Knežević-Solberg: Building a Norwegian Cave and karst database

PY. Jeannin: Tunnels and karst springs, a case study from the South-Eastern border of the Jura Mountains (Lake Biel, Switzerland)

D. Ford: Mahony and Tunago limestone plateaus and the Lac Belot hydration ridges, adjoining but contrasting karstlands in the lowlands of the Northwest Territories, Canada

R. Bosch: Landscape evolution of the Central Kentucky Karst

P. Griffiths: The Paradise Lost cover-collapse feature on northern Vancouver Island (British Columbia, Canada)

Humanities

In 2020/21, there were no guest seminars in the Humanities doctoral program.

Cultural Heritage Studies

Organisation of an international workshop *Our World Heritage*, March 2021, online in collaboration with the University of Kent and the University of Newcastle.

We participated in the organisation of an international conference *Cultivating the Continuity of the European Landscape: new challenges, innovative perspectives*, international conference on the occasion of the 20th anniversary of the ELC, Uniscap, Florence, 16-17 October 2020.

Molecular Genetics and Biotechnology

Students attended seminars organised by the Laboratory of Environmental and Life Sciences.

25. 11. 2020 (MiTeam)

Dr. Tina Šantl Temkiv (University of Aarhus); The role of bioaerosols in cloud formation in the high Arctic

2. 12. 2020 (MiTeam)

Dr. Vittorio Venturi (ICGEB, Trieste); Cell-cell signalling in the plant microbiome

16. 12. 2020 (MiTeam)

Dr. Andrés Muro (ICGEB, Trieste); Studies on neonatal hyperbilirubinemia and the Crigler-Najjar syndrome

31. 3. 2021 (MiTeam)

Dr. Drupad Trivedi (Manchester Institute of Biotechnology, UK); Metabolomics: a quest for my Star Trek tricorder

5. 5. 2021 (MiTeam)

Dr. Alenka Čopič (Montpellier Cell Biology Research Centre, CNRS, France); Function of perilipins in the storage of lipids in lipid droplets

- **Scientific seminars at ICGEB** (approx. four per month):
<https://www.icgeb.org/outreach/seminars/>

The seminars were rescheduled in February 2021 after being postponed in February 2020 due to the deteriorating epidemiological situation caused by the spread of Covid-19.

Cognitive Language Sciences

We held the following invited seminar in 2020/21:

8. 6. 2021

prof. dr. Ad Neeleman (University College London), *What unites, and what divides, right-node raising.*

Materials

In the 2020/21 academic year, the participation of students in seminars within the GS and Pregl's colloquia at the Institute of Chemistry was mandatory.

Seminars within GS

The invited lecturers' seminars are held in conjunction with the Physics program, for which a detailed list for the 2020/2021 academic year is provided.

The Pregl Colloquium at the National Institute of Chemistry

19. 11. 2020

Prof. Dr. Frank Noe (Freie Universität Berlin, Germany)

Deep Learning for Molecular Physics

21. 1. 2021

Prof. Dr. Núria López (COM) Institut Catala d'Investigacio Quimica Tarragona, Spain)
Simulations in Materials for Catalysis and Energy

18. 3. 2021

Prof. Dr. Bert Sels (COM)Faculty BioScience Engineering, Centre for Sustainable
Catalysis and Engineering, KU Leuven, Belgium)
Lignin-first biorefinery: challenges and opportunities

15. 4. 2021

Prof. Dr. Dmitry Yu. Murzin (Abo Akademi University, Turku/Abo, Finland)
Catalyst preparation at the meso scale: The art of shaping

16. 9. 2021

Prof. Dr. Raffaella Bounsanti (EPFL, Lausanne, Switzerland)
Colloidal chemistry for controlled and tuneable electrocatalyst

SCIENTIFIC EVENINGS

There were no scientific evenings due to the Covid-19 epidemic in the 2020/2021 academic year.

ANNEX 3 STUDENT SURVEYS

Student survey to assess the quality of course implementation

In front of you is a questionnaire with which we would like to find out your opinion on the quality of pedagogical work performed by a higher education teacher or assistant in a course that you studied as a student. The first part of the survey contains general questions that you can answer by circling the appropriate number on a scale from 1 to 5. The second part of the survey is dedicated to your comments, remarks and opinions. Your answers should express your personal opinion and not the opinion of the student group as a whole. The survey results will be used to provide feedback to the teacher or assistant as well as the faculty or school management, allowing them to eliminate potential weaknesses or maintain positive aspects of the pedagogical process, thereby improving the quality of study. This survey is anonymous.

Faculty/school:

Study program:

Course title:

Teacher:

Year:

Academic year:

Mode of study: full-time

part-time

A: GENERAL QUESTIONS

	POOR					GOOD
1. I am not at all satisfied with the implementation of the course.	1	2	3	4	5	The course was, in my opinion, perfectly executed. The teacher drew my attention and piqued my interest in the study content.
2. No study material was available for the course.	1	2	3	4	5	The teacher provided adequate study materials for the entire course.
3. The study content was presented incomprehensibly and incoherently. The teacher encouraged uncritical rote learning.	1	2	3	4	5	The teacher explained the material in a systematic, understandable and interesting way. They encouraged me to think and work independently.
4. The teacher was not available for my questions and discussion.	1	2	3	4	5	The teacher was always open to discussion and assisted me in finding answers to my questions.
5. I am not sure what I'm supposed to know for an exam or other forms of knowledge testing.	1	2	3	4	5	The teacher made it very clear what knowledge I needed to acquire in this course.
6. The teacher has a negative and incorrect attitude toward students.	1	2	3	4	5	The teacher has a positive and appropriate attitude toward the students.

9. How often did you attend lectures or other organised meetings with the teacher of this course?

1 - Never or very rarely

2 - Sometimes

3 - Often

4 - Regularly

Student workload survey

In front of you is a survey on how much time and effort you have put into studying for the aforementioned course. Complete the survey by evaluating all of your activities related to meeting your obligations in this course: attendance at lectures and tutorials, seminar paper preparation, laboratory or field work, collection of literature and teaching materials, independent learning outside of lectures or organised meetings in the course, and any other activities directly related to the work on the course. Fill in only the fields related to the completed course.

This survey is anonymous.

1. Attendance at lectures:

0 - 20 %

20 - 40 %

40 - 60 %

60 - 80 %

80 - 100 %

2. Attendance at tutorials, laboratory exercises and field work, or workshops:

0 - 20 %

20 - 40 %

40 - 60 %

60 - 80 %

80 - 100 %

3. Total number of hours of independent work on the course: _____

The student's independent work is work that the student performs outside the organised forms of study (lectures, exercises, laboratory and field exercises or workshops). Independent work includes independent study of theoretical work, independent work as preparation for exercises or workshops, work after them, report preparation, homework preparation, independent work on a project (may be group work, but outside of organised meetings), collecting literature and additional material, seminar paper preparation, final preparation for an exam or other types of knowledge testing, and other independent work. Calculate the answer as the total number of hours of independent work on the course.