Strengthening Teaching Competences in Higher Education in Natural and Mathematical Sciences

After the project closing: sustainability of the TeComp project

> Miroslav Ćirić University of Niš, Serbia



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TeComp

Achieving sustainability

Rulebook on continuing professional development of teaching staff

- Strategy for the support and on-going improvement of the quality of teaching and learning
- Introduction of new relevant study programs and courses





Rulebook



Rulebook on continuing professional development of teaching staff









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- The existing Center for Professional Development of the Faculty of Science provided professional development for third parties (out of the Faculty), but **not for the teaching staff** of the Faculty
- Rulebook on the work and organization of the Center has been amended so that also foresees continuing professional develop-ment of our teaching staff
- The new Rulebook was adopted by the Faculty Academic Council
- The Center will accredite Courses for CPD of teaching staff





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- The Center for the Development of Education in the Field of Natural Sciences, Mathematics and Computer Sciences was established at the Faculty Sciences
- Act on the establishment and Rulebook on the work of the Center were adopted by the Faculty Administrative Council
- The Rulebook foresees continuing professional development of the Faculty teaching staff





- The working proposal of the Rulebook of the Lifelong Learning Center was adopted by the Quality Assurance Commission of the Faculty Sciences
- The activity of the Center also includes CPD of the teaching staff, as well as support to improvement of the quality of T&L
- The new Rulebook on criteria for the selection of university teachers attaches greater importance to activities aimed at improving quality of teaching and learning





Strategy for the support and on-going improvement of the quality of T&L at HEIs













- a unique strategy proposal was prepared for all partner institutions
- submitted for adoption to the Quality Assurance Commission and the Academic Council of the Faculty of Sciences
- simultaneously submitted for adoption to the Center for Quality Improvement and the Senate of the University of Niš
- will be an integral part of the Quality Assurance Strategies of the Faculty and the University







- submitted for adoption to the Committee for Quality and Self-evaluation of the Faculty of Sciences
- will be an integral part of the Quality Assurance Strategy of the Faculty







Adopted by the Quality Assurance Commission of the Faculty of Sciences

will be an integral part of the Quality Assurance Strategy of the Faculty

New study programs and courses

study programs and courses related to T&L in natural sciences, mathematics and computer science







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- New and innovated bachelor and master degree courses acredited
 - Methodology of teaching informatics
 - Digital media in blended learning
 - Interactive tools for online teaching and testing
 - Methodology of teaching programming
 - Multimedia information systems
 - Methodology of electronic learning

• Virtual classrooms

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- Working with talented students
- Methodology of teaching chemistry
- Modern methods of learning chemistry
- Methodology of teaching biology
- Methodology of teaching geography
- Methodology of practical teaching of geography
- Methodological innovations in geography

- Program packages in teaching mathematics
- Methodology of teaching mathematics





Accredited new study program of doctoral studies

Methology of teaching natural sciences (biology, chemistry, physics, geography), mathematics and computer science at the Faculty of Sciences





- New and innovated bachelor and master degree courses accredited
 - Educational software
 - Innovations in teaching of mathematics
 - Experiments in teaching of physics
 - Methodology of scientific research work
 - Selected chapters of physics teaching methodology
 - Application of modern ICT in physics teaching

Continuation of cooperation

existing cooperation expanded and new forms of cooperation introduced

d computer science













- New Memorandum of Cooperation between University of Niš and University of Oviedo
 - Joint Erasmus+ mobility projects for students and staff
 - Joint research projects
 - Joint programs of doctoral studies

Irina Perfilieva (University of Ostrava) and Irene Díaz (University of Oviedo) are engaged in the newly introduced study program Artificial intelligence and machine learning at the Faculty of Science, University of Niš









- The long-standing cooperation between University of Novi Sad, University of Oviedo and Matej Bel University of Banská Bystrica was further expanded
- Cooperation of four universities from Serbia with two unversities from Albania – very important for the further promotion of regional cooperation
- strengthened internal cooperation between universities in Serbia, as well as internal cooperation between universities in Albania

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Thank you for your attention

