Summer School

For the Development of Doctoral Education and Research Capacities of Kyrgyzstani Academy

AGENDA

Kyrgyzstan, Lake Ysyk-Köl, August 9-20, 2021

The purpose of the summer school is:

1. To train Kyrgyzstani university administrators of PhD programmes to learn the peculiarities of running PhD programmes and enhance their administration and managerial competencies.
2. To train academic staff and PhD supervisors to improve their research and supervisory competencies.

International professors and researchers from Brunel University London, Hamburg University of Applied Sciences, Vilnius Gediminas Technical University, EXOLAUNCH GmbH will teach for two weeks in Ysyk-Köl on issues indicated as priorities by the survey conducted in 2021, that are:

1) A package of mandatory documents (a detailed list and templates, examples of filling them out, especially electronic versions) submitted by doctoral students to the thesis defence procedure. It is necessary to clarify what remains inside the institute for checking and controlling documents and separately what is permitted and must be displayed for public access (review, acquaintance, etc.).

2) How to prepare publications for doctoral students and their quality and quantity requirements, scoring.

3) Separately consider the issue of preparation by an expert of a review of a publication (article, manual, manual, book, etc.) options or sections that must be reflected in the examination.

4) What is the procedure in case of establishing plagiarism at work? What are the procedural actions on the part of the expert council and/or commission? And is there a chance for a job seeker to submit a rejected job?

5) The quality criteria for evaluating the dissertation are the main sections reflected and presented (in the form of an alphabetic and/or numerical version with a ranking). Give more details and options, examples.

6) How is the archiving of documentation regarding the work of applicants carried out.

7) The procedure for awarding an academic degree and registration of diplomas.

8) Lists/catalogues and contents of passport / s (cyphers) of scientific speciality (details) for scientific degrees and academic titles. Requirements and regulations for obtaining an academic degree/titles by doctoral students.

9) It is essential to consider and pay more attention to the dissertation's statistical processing.

10) Conduct extended training on methods of working with an electronic library, searching for the necessary literature and sources, etc.

11) What are the requirements and procedures for registering a patent for an invention?

12) Big data analytics, ML, and/or AI in public health or health services and hospital settings.

The lecturers:

Prof. Hamed Al-Raweshidy
Brunel University London, United Kingdom

Dr Tatiana Kalganova, BSc (Hons), PhD, MIEEE
Reader in Intelligent Systems, Postgraduate Research Director, Head of Industrial and Applied AI research center, Athena SWAN SAT Lead, Exchange coordinator including ERASMUS
Department of Electronic and Electrical Engineering
Brunel University London, United Kingdom
Tatiana.Kalganova@brunel.ac.uk

Prof Dr Marina Tropmann-Frick
Professor for Data Science
University of Applied Sciences Hamburg, Germany
Marina.Tropmann-Frick@haw-hamburg.de

Prof. Dr Jelena Stankevičienė
Dean of the Faculty of Business Management
Head of the Committee of Doctoral Studies (Economics)
Member of the Committee of Humanities and Social Science at Lithuanian Research Council
Editor-in-Chief of the Journal of Business Economics and Management (WoS, Scopus)
Vilnius Gediminas Technical University VILNIUS TECH, Vilnius, Lithuania
E-mail: jelena.stankeviciene@vilniustech.lt

Prof. Dr Daiva Jurevičienė
Head of the Department of Economics Engineering
Member of the Committee of Doctoral Studies (Economics)
Topic Editor of "Sustainability" (Open Access Journal by MDPI)
Vilnius Gediminas Technical University VILNIUS TECH, Vilnius, Lithuania
E-mail: daiva.jureviciene@vilniustech.lt

Dr Milena Medineckienė
Vice Dean of the Faculty of Business Management
Former President of Lithuanian Society of Young Researchers
Vice-president of Lithuanian Scientific Society
Co-founder of the Presidential Award of the Best Dissertations
Vilnius Gediminas Technical University VILNIUS TECH, Vilnius, Lithuania
E-mail: milena.medineckiene@vilniustech.lt

Assoc. Prof. Dr Viktorija Skvarciany
Vilnius Gediminas Technical University VILNIUS TECH, Vilnius, Lithuania
Scientific Secretary of the Committee of Doctoral Studies (Economics)
Head of the Research Institute of Dynamic Management
Editor-in-Chief of the Journal "Business, Management and Economics Engineering"
(WoS Emerging Sources, Scopus)
E-mail: viktorija.skvarciany@vilniustech.lt

Prof. Dr Nazokat Kasymova
Professor of Tashkent State University of Oriental Studies, Uzbekistan
Higher Education Reforms Expert/Bologna Expert of the Ministry of Education of Uzbekistan.
NazokatKasymova08@gmail.com

The programme is open to administrative staff, researchers, scientific supervisors, and PhD students from 7 Kyrgyzstani universities:

1. International University of the Kyrgyz Republic
2. International School of Medicine
3. Kyrgyz State Technical University
4. Kyrgyz State University Construction, Transport & Architecture
5. Diplomacy Academy of the Ministry of Foreign Affairs
6. Kyrgyz National Agrarian University
7. Osh State University

All sessions of the summer school will be available online via Zoom. Use the following link:
https://us02web.zoom.us/j/6024517673?pwd=eXVDT1ZMR0hPbEZpTnB0R1gwY0dQUT09

Conference ID: 602 451 7673

Access code: 907616

Date	Time	Event
Sunday, August 8th	18:30-19:30	Arrival to Bishkek Departure to Issyk-Kul Check-in/Registration at Akun Resort Centre Welcome session. Dinner
Monday, August 9th	10.00-12.00	Opening: **Prof. Asylbek A. Aidaraliev**, Chairman of the Board of Trustees of the AC "International University of Kyrgyzstan" **Prof. Arsen A. Aidaraliev**, President of the AC "International University of Kyrgyzstan" **Mrs Gulnara Chokusheva**, Head of the National Erasmus Plus office in Kyrgyzstan **Prof. Ainura A. Adieva**, Rector of the International University of the Kyrgyz Republic School Programme. Organisational issues. Group photo
	12.30-13.30	Lunch
	14.00-15.30	*Session 1* **Prof. Hamed Al-Raweshidy** Lecture: **How to prepare a presentation for viva and conference** ● Motivation for presentation ● Structure of presentation ● How to write aim and objectives ● Scientific contributions ● How to behave during the presentation ● How to write conclusions
	15.30-16.00	Coffee/tea break
	16.00-17.30	*Session 2* **Dr Tatiana Kalganova** Workshop: **Organisation & preparation of a presentation**

		• Group formation, taking into account multidisciplinarity (law, medicine, engineering, agriculture, economists, computer scientists) • Brain-storming foundations • Formation of the overall topic for the group work, taking into account the speciality of each group
Tuesday, August 10th	10.00-12.00	*Session 1* **Prof. Dr Marina Tropmann-Frick** Lecture: **Agile Project Management** • As covered in this course, lean and agile project management is meant to enhance traditional project management, not to replace science. • A strong foundation in traditional project management is necessary to understand and appreciate the benefits of adopting lean and agile. • It is no longer enough to manage a timeline and a cost baseline simply. The Project Leader must be an excellent communicator, leader, and innovative contributor.
	12.30-13.30	Lunch
	14.00-15.30	*Session 2* **Prof. Dr Daiva Jureviciene** Workshop: **Code of Academic Ethics** Groups of participants (3-4 participants) will prepare the comparative analysis of the Vilnius Tech Code of Academic Ethics and their own institution Code of Academic Ethics and systemise the best ideas/practice. As a result, they will propose amendments to their own institution Code of Academic Ethics, if needed.
	15.30-16.00	Coffee/tea break
	16.00-17.30	*Session 3* **Prof. Dr Daiva Jureviciene** Workshop: **Doctoral student work plan** After presenting general ideas of the structure for the work plan, each participant will prepare an individual Doctoral student work plan for themself/their doctoral student and present it to the class.

Wednesday August 11th	10.00-12.00	*Session 1*
		Prof. Dr Marina Tropmann-Frick
		Lecture: **Data Analytics & Visual Analytics**
		• Data Information, Big Data
		• Analytical Life Cycle
		    ○ Domain Analysis
		    ○ Data Acquisition
		    ○ Data Preparation
		    ○ Explorative Analysis
		    ○ Visual Analytics
		    ○ Feature Engineering
		    ○ Data Modelling
		    ○ Deployment

	12.30-13.30	Lunch
	14.00-15.30	*Session 2* **Dr Milena Medineckiene** Workshop: **Entrepreneurship integration in the study process and University-Business collaboration (Part I).** Groups of participants will work on preparing the entrepreneurship and university business plan. For the practical part (workshop) of the course, they will prepare information and activities on the ways of entrepreneurship and business collaboration implementation in their institutions.
	15.30-16.00	Coffee/tea break
	16.00-17.30	*Session 3* **Dr Milena Medineckiene** Workshop: **Entrepreneurship integration in the study process and University-Business collaboration (Part II).** Groups of participants will work on preparing the entrepreneurship and university business plan. For the practical part (workshop) of the course, they will prepare information and activities on the ways of entrepreneurship and business collaboration implementation in their institutions.
Thursday, August 12th	10.00-12.00	*Session 1* **Prof. Dr Marina Tropmann-Frick** Lecture/Discussion: **Supervision of Doctoral Students** ● Selection, recruitment, and admission of candidates ● Supervision arrangements and working relationships with candidates ● Induction and training ● Judging dissertations ● The institutional environment for a quality-oriented postgraduate research phase
	12.30-13.30	Lunch
	14.00-15.30	*Session 2* **Prof. Dr Jelena Stankevičienė** Lecture: **How to Get Published (Part I)** How to choose the journal. What is a Scientific Paper? IMRAD. How to Prepare the Title. Abstract. Rules for a Good Introduction. How to Write the Materials and Methods section. Methods of Presenting the Data. How to Write the Results. Components of the Discussion. Conclusions. Publishing Process. The Peer Review Process. Ethics, Rights & Permissions. A measure of Research Impact
	15.30-16.00	Coffee/tea break
	16.00-17.30	*Session 3* **Prof. Dr Jelena Stankevičienė** Lecture: **How to Get Published (Part II)** How to choose the journal. What is a Scientific Paper? IMRAD. How to Prepare the Title. Abstract. Rules for a Good Introduction. How to

		Write the Materials and Methods section. Methods of Presenting the Data. How to Write the Results. Components of the Discussion. Conclusions. Publishing Process. The Peer Review Process. Ethics, Rights and Permissions. A measure of Research Impact.
Friday, August 13th	10.00-12.00	*Session 1* **Prof. Dr Marina Tropmann-Frick** Lecture/Discussion: **Administration of Doctoral Education** ● Use Case - Germany, Hamburg University of Applied Sciences ● Standards ● Institutional Requirements for the Right to Confer Doctoral Degrees
	12.30-13.30	Lunch
	14.00-15.30	*Session 2* **Assoc. Prof. Dr Viktorija Skvarciany** **Lecture & Workshop: A literature review. Information search. Developing an idea for a scientific paper (Part I)** What is a literature review? How to prepare information search in high-level scientific databases, like Clarivate Analytics WoS and Scopus. How to prepare a scientific literature review and highlight the authors' contribution to the field of science. How to check the Impact Factor and/or SNIP of the journals. How to develop an idea for a scientific paper based on a literature review.
	15.30-16.00	Coffee/tea break
	16.00-17.30	*Session 3* **Assoc. Prof. Dr Viktorija Skvarciany** **Lecture & Workshop: A literature review. Information search. Developing an idea for a scientific paper (Part II)** What is a literature review? How to prepare information search in high-level scientific databases, like Clarivate Analytics WoS and Scopus. How to prepare a scientific literature review and highlight the authors' contribution to the field of science. How to check the Impact Factor and/or SNIP of the journals. How to develop an idea for a scientific paper based on a literature review.
Saturday, August 14th	10.00-11.00	Wrap-up and planning for next week
	After 11.00	Group work
	19.00	Gala-dinner
Sunday, August 15th		Free time / Social Programme
Monday, August 16th	10.00-12.00	*Session 1* **Prof. Dr Marina Tropmann-Frick** Lecture/ Discussion: **Big Data Management (Part I)** ● Data & information: definition, types of data, measurements ● Data management (traditional) ● Engineering process of developing the data storing plan (--> modelling) ● Conceptual - logical - physical models

		● Relational Database Systems / DBMSs ● Structured Query Language (SQL) - overview ● Big Data Models and Architectures ● No SQL Databases ● Databases for documents, graphs, etc.
	12.30-13.30	Lunch
	14.00-15.30	*Session 2* **Prof. Hamed Al-Raweshidy** Lecture / Discussion: **How to start and complete a successful PhD** ● What do you need to read ● Working time ● How to deal with your supervisor ● How to behave during three years of your PhD time
	15.30-16.00	Coffee/tea break
	16.00-17.30	*Session 3* **Dr Tatiana Kalganova** Workshop: **Preparing the group presentation** ● Structure of presentation ● Research question ● Colour scheme ● Scope of the project ● Stakeholders of the project developed
Tuesday, August 17th	10.00-12.00	*Session 1* **Prof. Dr Marina Tropmann-Frick** Lecture/ Discussion: **Big Data Management (Part II)** ● Data & information: definition, types of data, measurements ● Data management (traditional) ● Engineering process of developing the data storing plan (--> modelling) ● Conceptual - logical - physical models ● Relational Database Systems / DBMSs ● Structured Query Language (SQL) - overview ● Big Data Models and Architectures ● No SQL Databases ● Databases for documents, graphs, etc.
	12.30-13.30	Lunch
	14.00-15.30	*Session 2* **Dr Tatiana Kalganova** Lecture / Discussion: **AI: From optimisation to Deep learning in applications** ● Genetic Algorithms ● Ant Colony Algorithms ● Capsule Neural networks
	15.30-16.00	Coffee/tea break
	16.00-17.30	*Session 3* **Dr Tatiana Kalganova** Workshop: **AI around us**

		- Exploration of how AI can apply in various applications - Scoping the research project with AI element - Data requirements to AI system - Quality evaluation of results - Experimental design
Wednesday August 18th	10.00-12.00	*Session 1* **Prof. Nazokat Kasymova** Master class: **Quality Assurance in Higher Education and PhD process**
	12.30-13.30	Lunch
	14.00-15.30	*Session 2* **Project Coordination Meeting**
	15.30-16.00	Coffee/tea break
	16.00-17.30	*Session 3* The panel of experts. Presentation of the results
Thursday, August 19th	10.00-12.00	*Session 1* Presentation of the results
	12.30-13.30	Lunch
	14.00-15.30	*Session 2* Presentation of the results
	15.30-16.00	Coffee/tea break
	16.00-17.30	*Session 3* Wrap up the programme Closing ceremony / Awards
Friday, August 20th	9.00-11.00	**Checking out** **Departure to Bishkek**