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"STEM-TRAINING AND PRACTICAL TEACHING METHODS" STEM WEEK



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The program of the STEM Festival and summer school
on the basis of the L.N. Gumilyov Eurasian National University
«STEM in Modern Education: Trends and Strategies»

June 20-30, 2022

Nur-Sultan



Time	Name of the event	Meeting place
June 19		
Arrival of the festival participants		Nursultan Nazarbayev International Airport. Railway stations-1. Railway stations-2.
June 20 (online / offline)		
Nur-Sultan time		
13.30-14.15	Registration of participants of the festival and summer school.	2 Satpayev str. Administrative building, conference hall foyer, room 303.
14.15-15.00	<p>Opening of the festival and summer school Welcome speech:</p> <p>Member of the Management Board-Vice-Rector for Academic Affairs Yerkin Ongarbayev.</p> <p>Dean of the Faculty of Information Technology, Professor <u>Shakhmaran Seilov</u>.</p> <p>Director of the Department of International Cooperation Anastasia Karmelyuk.</p> <p>Deputy Dean for Scientific Work of the Faculty of Information Technology Ainur Zhumadillayeva.</p> <p>Project manager, Professor of the Department of Informatics of the Faculty of Information Technology Professor Meruyert Serik.</p>	2 Satpayev str. Administrative building, room 303}



	<p>Project Manager, Deputy Chairman of the Board - Vice-Rector for Strategic Development and Scientific Work of the VKU named after S. Amanzholov Rovnyakova Irina.</p> <p>Project manager, associate professor of SKU named after M. Auezov Omashova Gaukhar Shapaevna.</p> <p>Project trainer, Associate Professor of the Department of System Analysis and Management of L.N. L.N. Gumilyov, Ph.D. Sagnaeva Saule Kayrullievna.</p>	
15.00-15.30	The work of an open lecture hall (lecturers from universities participating in the project, online).	2 Satpayev str. Administrative building, conference hall, room 208.
15.30-16.00	Tour of the atrium "Kultegin". Excursion to the University museum.	2 Satpayev str. Administrative building.
16.15-17.00	Exhibition of developments of scientific STEM objects.	11 Munaytpasov str., Educational and laboratory building No. 4.
17.00-17.30	Exhibition of developments of scientific STEM objects.	13 Munaitpasov str., Building No. 3.
17.30-19.30	Business dinner for festival participants.	
June 21 (online / offline)		
10.00-10.15	Gathering of festival participants at the entrance to the Educational and Administrative Building.	2 Satpayev str. Administrative building.
10.15-11.30	Excursion to the Monument "Bayterek".	Monument "Bayterek" NURZHOL Boulevard, 14.
11.30-13.00	Excursion to the International Exhibition Center "EXPO".	International Exhibition Center "EXPO", 53 Mangilik El Avenue.
13.00-14.00	Lunch break.	
14.00-16.00	Visit to the Museum and Memorial Complex. "ALZHIR".	Akmola region, <u>Tselinogradsky</u> district,



		Akmol, Linear str., building 2B.
16.00-17.00	Excursion to the National Museum of Kazakhstan.	Tauelsizdik Avenue, 54.
17.00-19.00	Dinner for festival participants.	
19.00-19.30	Passage to the educational and administrative building of the University.	2 Satpayev str. Administrative building.
June 22		
Continuation of the summer school		
10.00-11.30	"Adaptation of STEM teaching methods to better influence the planning and design of laboratory work" Balgyn Akhmetova, L.N.Gumilyov ENU, <u>Beibitgul Dyrynbayeva</u> International school of Nur-Nursultan	11 Pushkin Street Building No. 2 "Otyrar library" room 407. online
11.40-13.00	"STEM approach in teaching computer science on the example of "AR Augmented Reality". SKU named after M. Auezov, <u>Zhaydakbayeva Lyazzat Kuandykovna</u> , Yermakhan Nurdaulet.	11 Pushkin Street Building No. 2 "Otyrar library" room 407
14.00-15.30	"Robotics in STEM Education" Symbat Nurgaliyeva, L.N.Gumilyov ENU.	11 Pushkin Street Building No. 2 "Otyrar library" room 407.
15.40-16.10	"STEM approach in teaching physics", SKU named after M. Auezov, <u>Gauhar Omashova</u> .	11 Pushkin Street Building No. 2 "Otyrar library" room 407.
16.20-17.00	"Robotics in STEM Education" Symbat Nurgaliyeva, L.N.Gumilyov ENU. Practical lesson	11 Pushkin Street Building No. 2 "Otyrar library" room 407.
17.10-18.00	STEM education in universities of Kazakhstan. L.N.Gumilyov ENU, Serik Meruyert. Discussion.	11 Pushkin Street Building No. 2 "Otyrar library" room 407.
June 23		
10.00-11.30	"Methods for creating a private cloud" L.N.Gumilyov ENU, <u>Sadvakassova Aigul, Aitmaganbetov Asset</u> .	11 Pushkin Street Building No. 2 "Otyrar library" room 407.



11.40-13.00	STEM training in the content of the laboratory complex "Desktop simulator IT-ALEM" Marzhan Kali, L.N.Gumilyov ENU.	11 Pushkin Street Building No. 2 "Otyrar library" room 412.
14.00-14.30	STEM training in the content of the laboratory complex "Desktop simulator IT-ALEM" Marzhan Kali, L.N.Gumilyov ENU.	11 Pushkin Street Building No. 2 "Otyrar library" room 412.
14.40-16.00	"Using the Case-study method in the preparation of competitive specialists", L.N.Gumilyov ENU Kintonova Aliya Zheksembaevna.	11 Pushkin Street Building No. 2 "Otyrar library" room 407.
16.10-17.00	The use of Case-study at the South Kazakhstan University named after M. Auezov, SKU named after. M. Auezova, Nyshanbaeva Zhanar. Discussion.	11 Pushkin Street Building No. 2 "Otyrar library" room 407.
June 24		
10.00-11.30	STEM training in the content of the laboratory complex "Desktop simulator IT-ALEM" Marzhan Kali, L.N.Gumilyov ENU. Practical lesson.	11 Pushkin Street Building No. 2 "Otyrar library" room 407.
11.40-13.00	High-performance computing on the PARAM-BILIM University supercomputer and on the IBM QUANTUM quantum computer, ENU named after L.N. Gumilyov, Yerlanova Gulmira.	11 Pushkin Street Building No. 2 "Otyrar library" room 407.
14.00-15.30	"Visualization of computer neural network technologies and Stem elements" Gulmira Balgozhina, L.N.Gumilyov ENU. Practical lesson.	11 Pushkin Street Building No. 2 "Otyrar library" room 407.
15.40-16.10	"Visualization of computer neural network technologies and Stem elements" Gulmira Balgozhina, L.N.Gumilyov ENU. Master class.	11 Pushkin Street Building No. 2 "Otyrar library" room 407.
16.20-17.00	"Visualization of computer neural network technologies and Stem elements" Gulmira Balgozhina, L.N.Gumilyov ENU. Practical lesson.	11 Pushkin Street Building No. 2 "Otyrar library" room 407.



17.10-18.00	STEM education at the East Kazakhstan University named after S. Amanzholov, SKU im. M. Auezov. Discussion.	11 Pushkin Street Building No. 2 "Otyrar library" room 407.
June 27		
10.00-11.30	"Integration of engineering practices in education". Gultekin Cakmakci - Professor of Natural Science Education, Hacettepe University, Turkey.	Online. https://us04web.zoom.us/j/76989843550?pwd=EXleP_u0ijv85fpVQWpzFPUCE-cbhWq.1
11.40-13.00	"Software development for certification using machine learning algorithms". Nazarbayev Intellectual School, <u>Nasipzhan Duisegalieva</u> . Master-class.	11 Pushkin Street Building No. 2 "Otyrar library" room 407
14.00-15.30	"Software development for certification using machine learning algorithms". Nazarbayev Intellectual School, <u>Nasipzhan Duisegalieva</u> . Master-class.	11 Pushkin Street Building No. 2 "Otyrar library" room 407.
15.40-16.10	"Virtual reality in Education". L.N.Gumilyov ENU, Kalkabayeva Zukhra.	11 Pushkin Street Building No. 2 "Otyrar library" room 407.
16.20-17.00	"Virtual reality in Education". L.N.Gumilyov ENU, Kalkabayeva Zukhra.	11 Pushkin Street Building No. 2 "Otyrar library" room 407.
17.10-18.00	Virtual reality training at Yu. M. Auezov and VKU im.S. Amanzholov. Discussion.	11 Pushkin Street Building No. 2 "Otyrar library" room 407.
June 28		
10.00-10.50	The use of STEM in the training of future specialists, L.N.Gumilyov ENU, Shyndalyev Nurzhan.	11 Pushkin Street Building No. 2 "Otyrar library" room 407.
11.00-11.50	Development of a digital lighting module on the Arduino Uno platform. University "Yesil", Khasenova Leyla Galimbekovna.	11 Pushkin Street Building No. 2 "Otyrar library" room 407.
12.00-12.50	3D printer, steps from modeling to prototyping. Master-class, L.N.Gumilyov ENU, Toleubekov Talant.	11 Pushkin Street Building No. 2 "Otyrar library" room 407.



14.00-16.00	"Smart House", Akerke Dildabek, L.N.Gumilyov ENU.	11 Pushkin Street Building No. 2 "Otyrar library" room 407. https://us04web.zoom.us/j/78275643817?pwd=hJwiMwK6A8kDaZqyKi3ZScz-kCNPZk.1
16.10-17.00	Elements of artificial intelligence in the universities of Kazakhstan. Discussion.	11 Pushkin Street Building No. 2 "Otyrar library" room 407.
17.10-18.00	STEM elements in robotics: determination of soil moisture, YUKU im. M. Auezov, Agibaeva Karlygash	11 Pushkin Street Building No. 2 "Otyrar library" room 407.
June 29		
10.00-11.30	"Blockchain technologies in education", L.N. Gumilyov ENU, Sakhipov Aivar.	Online.
11.40-13.00	Setting up and implementation of the parallel computing cluster. Karelkhan Nursaule L.N.Gumilyov ENU.	11 Pushkin Street Building No. 2 "Otyrar library" room 407.
14.00-15.50	Data processing in STEM learning: theoretical aspects. Kh.Dosmukhamedov Atyrau University, PhD <u>Mukhambetova Meiramgul</u> .	Online. https://us04web.zoom.us/j/77437814418?pwd=J9MRtZPG9NjMdw2150Xe3aChi4sFJZ.1
16.00-16.50	Teaching distributed data technologies at L.N. Gumilyov, SKU im. M. Auezov and VKU them. S. Amanzholova. Discussion. Application of STEM in databases. Discussion.	11 Pushkin Street Building No. 2 "Otyrar library" room 407.
17.00-18.00	Teaching distributed data technologies at L.N. Gumilyov, Serik Meruyert.	11 Pushkin Street Building No. 2 "Otyrar library" room 407.
June 30		
10.00-11.30	"STEM elements and Big Data processing" Gulmira Nurbekova, L.N.Gumilyov ENU.	11 Pushkin Street Building No. 2 "Otyrar library" room 407.



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11.40-13.00	"Blockchain and the use of STEM elements" Yerzhan Zhalelov, L.N.Gumilyov ENU.	Online. https://us04web.zoom.us/j/74897989200?pwd=ilsBh-9tVqN7vnCX2NSwx3WpKzpuEI.1
14.00-14.50	Data processing in STEM learning: practical approaches. Kh.Dosmukhamedov Atyrau University, PhD <u>Mukhambetova Meiramgul</u> .	Online. https://us04web.zoom.us/j/76742070450?pwd=TUIMW96JBrE74fuCUG44CGYSJKrbV.1
15.00-15.50	Machine learning. Mathematical foundations. Practical implementation. L.N.Gumilyov ENU. Serik Meruyert.	11 Pushkin Street Building No. 2 "Otyrar library" room 407.
16.00-17.00	Closing ceremony of the summer school.	11 Pushkin Street Building No. 2 "Otyrar library" room 407.