

Ministry of Education and Science of Ukraine
Vasyl Stefanyk Precarpathian National University

ISSN 2311-0155

Journal
of Vasyl Stefanyk
Precarpathian National University

SCIENTIFIC EDITION

Series of Social and Human Sciences

PEDAGOGY

Vol. 4, No. 1, 2017

Ivano-Frankivsk
2017

Journal of Vasyl Stefanyk Precarpathian National University

SCIENTIFIC EDITION

Vol. 4, No. 1, 2017

Recommended for publication by Scientific Council of Vasyl Stefanyk Precarpathian National University
Certificate of State Registration KB No 20385-10185P

EDITORS

Tsependa Igor, *Vasyl Stefanyk Precarpathian National University, Ukraine* (Political Sciences), (Editor-in-Chief),
Zagorodnyuk Andriy, *Vasyl Stefanyk Precarpathian National University, Ukraine* (Functional Analysis), (Editor-in-Chief),

Budnyk Olena, *Vasyl Stefanyk Precarpathian National University, Ukraine* (Pedagogy of Primary Education), (Volume Editor).

EDITORIAL BOARD

Andrievskij Rostislav, *Russian Academy of Sciences, Russia* (Nanostructured Materials Science),
Artemovych Orest, *Vasyl Stefanyk Precarpathian National University, Ukraine* (Algebra and Number Theory),
Balanyuk Ivan, *Vasyl Stefanyk Precarpathian National University, Ukraine* (Economics and Management of National Economy, Economics and Business Management),
Blahun Ivan, *Vasyl Stefanyk Precarpathian National University, Ukraine* (Economic and Mathematical Modelling),
Budzulyak Ivan, *Vasyl Stefanyk Precarpathian National University, Ukraine* (Solid State Physics, Physics and Chemistry of Surface),
Cherepanyn Myron, *Vasyl Stefanyk Precarpathian National University, Ukraine* (Theory and History of Culture),
Chornobaj Yuriy, *National Academy of Sciences of Ukraine, Ukraine* (Ecology),
Cynarski Wojciech J., *Rzeszów University, Poland* (Physical Culture),
Duda Jan, *«AGH» University of Science and Technology, Poland* (Information Technologies, Mathematical Modelling),
Filevych Petro, *Vasyl Stefanyk Precarpathian National University, Ukraine, Ukraine* (Mathematical Analysis),
Fris Pavlo, *Vasyl Stefanyk Precarpathian National University, Ukraine* (Criminal Law and Criminology, Criminally Executive Law),
Gasyuk Ivan, *Vasyl Stefanyk Precarpathian National University, Ukraine* (Solid State Physics, Physics and Chemistry),
Goian Igor, *Vasyl Stefanyk Precarpathian National University, Ukraine* (History of Philosophy),
Greshchuk Vasyl, *Vasyl Stefanyk Precarpathian National University, Ukraine* (Philological Sciences),
Grygorchak Ivan, *Lvov Polytechnic National University, Ukraine* (Solid State Physics, Physical Engineering),
Hrytcenko Pavlo, *Institute for the Ukrainian Language of the NAS of Ukraine, Ukraine* (Philological Sciences),
Ivashkovych Serge, *University Lille 1, France* (Mathematical Analysis),
Karpiński Mikołaj, *University of Bielsko-Biala, Poland* (Security of Information Technologies),
Khorob Stepan, *Vasyl Stefanyk Precarpathian National University, Ukraine* (Philological Sciences),
Klymychyn Ivan, *Vasyl Stefanyk Precarpathian National University, Ukraine* (Astrophysics),
Kobetska Nadiya, *Vasyl Stefanyk Precarpathian National University, Ukraine* (Landed Law, Agrarian Law, Ecolaw, Natural Resource Law),
Kogut Igor, *Vasyl Stefanyk Precarpathian National University, Ukraine* (Solid State Electronics),
Kononenko Iryna, *University of Warsaw, Poland* (Ukrainian and Polish Language),
Kononenko Vitaliy, *Vasyl Stefanyk Precarpathian National University, Ukraine* (Philological Sciences),
Korobeynikov Georgiy, *National University of Physical Education and Sport, Ukraine* (Physiology of Man and Zoons),
Kosarevych Rostyslav, *Karpenko Physical-Mechanical Institute of the National Academy of Sciences of Ukraine, Ukraine* (Automated Systems, Advanced Information Technology),
Kosiewicz Jerzy, *Józef Piłsudski University of Physical Education in Warsaw, Poland* (Philosophy),

Kotyk Tetyana, *Vasyl Stefanyk Precarpathian National University, Ukraine* (Theory and Methodology of teaching),

Kozak Ihor, *Vasyl Stefanyk Precarpathian National University, Ukraine; The John Paul II Catholic University of Lublin, Poland* (Ecology, Landscape Ecology and Modeling),

Kozak Stefan, *Warsaw University, Poland* (Philological Sciences),

Kozlenko Mykola, *Vasyl Stefanyk Precarpathian National University, Ukraine* (Computer Systems and Components),

Krul Petro, *Vasyl Stefanyk Precarpathian National University, Ukraine* (Theory and History of Culture),

Kugutiak Mykola, *Vasyl Stefanyk Precarpathian National University, Ukraine* (Ethnology),

Kulyk Oleksii, *Ukrainian National Academy of Sciences, Ukraine* (Probability Theory, Mathematical Statistics),

Kurta Sergiy, *Vasyl Stefanyk Precarpathian National University, Ukraine* (Chemical Technology),

Kyiak Sviatoslav, *Vasyl Stefanyk Precarpathian National University, Ukraine* (Philosophy of Science, Philosophy of Education, Religious studies, Ukrainian studies),

Lazarovych Mykola, *Vasyl Stefanyk Precarpathian National University, Ukraine* (Elements and Devices of Computer Facilities and Control Systems),

Łebkowski Piotr, *«AGH» University of Science and Technology, Poland* (Automation and Robotics, Operational Researches, Information Technologies),

Levytsky Andriy, *Taras Shevchenko National University of Kyiv, Ukraine* (German Language),

Lopushansky Oleh, *Rzeszow University, Poland* (Mathematical Analysis),

Lushchak Volodymyr, *Vasyl Stefanyk Precarpathian National University, Ukraine* (Biochemistry),

Lytovchenko Volodymyr, *V. Lashkaryov Institute of Semiconductor Physics of NAS of Ukraine, Ukraine* (Physics of Semiconductors and Dielectrics),

Makarewicz Edwin, *University of Technology and Life Sciences, Poland* (Chemical Technology),

Makcymenko Sergii, *Institute of Psychology of G.S. Kostyuka NAPN of Ukraine, Ukraine* (Philological Sciences),

Malashkevich Georgii, *National Academy of Sciences of Belarus, Belarus* (Optics, Laser Physics),

Marchuk Vasyl, *Vasyl Stefanyk Precarpathian National University, Ukraine* (Political Science),

Mykhailenko Valerii, *Bukovyna State University of Finance and Economics, Ukraine* (German Language),

Myronyuk Ivan, *Vasyl Stefanyk Precarpathian National University, Ukraine* (Physics and Chemistry of Surfaces),

Novosyadly Stepan, *Vasyl Stefanyk Precarpathian National University, Ukraine* (Solid State Electronics),

Nykyforchyn Oleh, *Vasyl Stefanyk Precarpathian National University, Ukraine* (Geometry and Topology),

Nykyruy Lyubomyr, *Vasyl Stefanyk Precarpathian National University, Ukraine* (Physics of Semiconductors and Dielectrics),

Ostafiychuk Bohdan, *Vasyl Stefanyk Precarpathian National University, Ukraine* (Solid State Physics, Physics and Chemistry of Surface),

Ostapovych Oleh, *Vasyl Stefanyk Precarpathian National University, Ukraine* (German Language),

Osypchuk Mykhailo, *Vasyl Stefanyk Precarpathian National University, Ukraine* (Probability Theory, Mathematical Statistics),

Panchuk May, I.F. *Kuras Institute of Political and Ethnic Studies at NAS of Ukraine, Ukraine* (Ethnology),

Parpan Vasyl, *Vasyl Stefanyk Precarpathian National University, Ukraine* (Forestry, Ecology),

Petryshyn Lubomyr, *Vasyl Stefanyk Precarpathian National University, Ukraine; «AGH» University of Science and Technology, Poland* (Computer Systems and Components),

Plichko Anatolij, *Cracow University of Technology, Poland* (Mathematical Analysis),

Pylypenko Andrii, *Ukrainian National Academy of Sciences, Ukraine* (Probability Theory, Mathematical Statistics),

Pylypiv Volodymyr, *Vasyl Stefanyk Precarpathian National University, Ukraine* (Solid State Physics, Physics and Chemistry of Surface),

Reient Oleksandr, *Vasyl Stefanyk Precarpathian National University, Ukraine* (History of Ukraine),

Roach R. Ron, *East Tennessee State University, USA* (Social Sciences),

Rudenko Svitlana, *Yuriy Fedkovych Chernivtsi National University, Ukraine* (Ecology),

Rudnytzkyi Leonid, *La Salle University, USA* (Philological Sciences),

Sajdak Anna, *Jagellon University, Poland* (Pedagogical Sciences),

Salii Yaroslav, *Vasyl Stefanyk Precarpathian National University, Ukraine* (Physics and Chemistry of Surface),

Salyha Taras, *Ivan Franko Lviv National University, Ukraine* (Theory of Literature),

Sannikov Stanislav, *Russian Academy of Sciences, Russia* (Forestry, Ecology),

Sharyn Sergii, *Vasyl Stefanyk Precarpathian National University, Ukraine* (Mathematical Analysis),
Shyjchuk Oleksandr, *Vasyl Stefanyk Precarpathian National University, Ukraine; University of Technology and Life Sciences, Poland* (Physics and Chemistry of Surfaces),
Sirenko Gennadiy, *Vasyl Stefanyk Precarpathian National University, Ukraine* (Powder Metallurgy and Composite Materials),
Szarota Zofia, *Pedagogical University of Cracow, Poland* (Pedagogical Science),
Tkachuk Iryna, *Vasyl Stefanyk Precarpathian National University, Ukraine* (Finance, Money and Credit),
Tymkiv Bogdan, *Vasyl Stefanyk Precarpathian National University, Ukraine* (Decorative and Applied Arts),
Vasylieva Valentyna, *Vasyl Stefanyk Precarpathian National University, Ukraine* (Civil Law and Process, Domestic Law, International Private Law),
Velukochyi Volodymyr, *Vasyl Stefanyk Precarpathian National University, Ukraine* (Historiography, History of Ukraine, Source Studies),
Vovk Myron, *Vasyl Stefanyk Precarpathian National University, Ukraine* (Theory and History of Pedagogy),
Yakubiv Valentyna, *Vasyl Stefanyk Precarpathian National University, Ukraine* (Economics and Business Management),
Zahrai Larysa, *Vasyl Stefanyk Precarpathian National University, Ukraine* (Social Psychology),
Zatorskyi Roman, *Vasyl Stefanyk Precarpathian National University, Ukraine* (Mathematical Logic, Theory of Algorithms, Discrete Mathematics, Algebra, Number Theory),
Zavgorodnya Tetyana, *Vasyl Stefanyk Precarpathian National University, Ukraine* (Pedagogy and History of Pedagogy).

Editorial address:

Vasyl Stefanyk Precarpathian National University,
57, Shevchenko Str.,
76018, Ivano-Frankivsk, Ukraine
Tel.: +380 (342) 59-60-50
E-mail: jpnu@pu.if.ua
<http://jpnu.pu.if.ua/>

