

Land Sciences

V.V. Minenkova, D.V. Maksimov, T.A. Volkova, Yu.I. Karpova

Tourism and Recreation Facilities of Krasnodar Region: Satisfaction of Holidaymakers as a Reflection of the Current Situation

Key words and phrases: quality of tourism services; Krasnodar region; recreation; recreational areas of the Krasnodar region; recreational needs; tourism; tourism and recreational facilities.

Abstract: In order to meet consumer needs and ensure quality control of tourism and recreation industry as a whole, it is necessary to provide up-date information, which concerns not only the state of tourism and recreational facilities, but gives an idea about the effectiveness of work with consumers. Holiday resorts of the Krasnodar region have a long-standing practice of many generations of Russian citizens. The resorts of the Krasnodar region attract tourists from almost all regions of Russia.

page 7-12

Pedagogy and Psychology

N.N. Vasilyeva

Peculiarities of Cognitive Functions in Primary School Children with Poor Writing Skills: Neuropsychological Analysis

Key words and phrases: cognitive functions; primary school children; writing difficulties.

Abstract: The paper is devoted to the neuropsychological analysis of visual gnosis, visual and auditory memory, dimensional concepts and control functions in early school children with poor writing skills. The results of the study have shown that there are some peculiarities of the formation of cognitive functions in children with poor writing skills. The analysis of higher mental functions is really important for integrated psycho-pedagogical approach to these children. It enables to establish the link between writing problems in children with mental functions and choose the best and most suitable way of correction.

page 13-17

I.A. Neyasova

Social Experience as a Pedagogical Phenomenon

Key words and phrases: personality; life experience; social experience; social perceptions, experience of creative activity.

Abstract: In the paper the social experience is seen as a fundamental pedagogical phenomenon, actively explored in modern science. The authors described various approaches to the definition of the concept social experience and its intrinsic characteristic, components, functions and ways of development of social experience.

page 18-20

A.K. Sviridov

Stylistic Determinants of Individual's Behavior

Key words and phrases: basic need; behavior; need for understanding; need for self-actualization; social contact; individual style.

Abstract: The paper analyzes relevant problems of modern psychology related to idiosyncratic determinants of behavior that serve as orientation to the value perception of the object of cognition. From the perspective of the theory of style and individuality the author considers the identity of a person as a system-forming factor determining individual style.

page 21-23

Professional Training

O.N. Berishvili

Mathematical Training of Students Majoring in Agricultural Engineering

Key words and phrases: mathematical training of agricultural engineers; mathematical model; methods of optimal solutions.

Abstract: The paper discusses the contradictions between the professional level of agricultural engineers and the changing needs of agricultural production; the methodological base of mathematical training of students majoring in agricultural engineering.

page 24-26

N.V. Buldakova

To the Question of Culture of Professional Vision in Competency-Based Training of University Students

Key words and phrases: professional culture; culture of professional forecasting; vision; competency; competence; university training.

Abstract: The authors substantiated the expediency of forming a culture of professional vision in future specialists in the process of professional training. The views of different authors on the problem of the defining the essence of phenomena competency/ competence were discussed. A comparative analysis of university graduates' competences in accordance with the requirements of the Government Education Standards and components of the culture of professional vision was made.

page 27-33

L.V. Dolgopolova

Development of the Model of University Teachers' Training to Apply Innovative Educational Technologies

Key words and phrases: innovative educational technologies; components of the model; methodological culture; model training; university teachers.

Abstract: The paper describes the components of a model of university teachers' training to use innovative educational technologies. This model includes the following components: target-analytical, content and project-based, procedure and activity-based, reflexive-evaluative. The author stresses the need to develop methodological culture of university teachers in the process of their training to use innovative educational technologies. The developmental potential of these technologies is disclosed.

page 34-36

L.A. Karnaukh, Yu.P. Vetrov

Psychological and Pedagogical Conditions for the Implementation of a Competence-Based Approach to Professional Training at University

Key words and phrases: intensification of training and professional activity of students; competence-based approach; motivational conditions; environment-forming psychological and pedagogical conditions; training and information environments; environment functions.

Abstract: The paper describes psychological and pedagogical conditions for the implementation of a competence-based approach to professional training at university, including motivational and environmental conditions. The authors focus on the need to construct a learning-information environment supporting the work of teachers and organizing cognitive activity of students. The features of this environment have been highlighted.

page 37-39

E.A. Ostrikova

The Problems of Regionalization of Education

Key words and phrases: regional development; regionalization of education; approaches to learning; content of education; culture; culture-centered model of education.

Abstract: The paper analyzes the problem of regionalization of education from the perspective of the requirements of a modern regional policy, public demand and needs of educational practice. The author discusses several approaches to the understanding of the process of regionalization of education. Methodological guidelines of educational paradigms that ensure the process of regionalization of education have been identified. The conclusion is made that the regionalization of education determines the creation of personality-oriented and culture-centered models of educational content.

page 40-42

E.A. Prokhorova, Yu.P. Vetrov

Socialization of an Individual in the Process of Professional Training

Key words and phrases: professional training; socialization; professional socialization; elements of professional socialization; cultural competence; professional competence; professional standards; socialization at university; social norms; degree of socialization.

Abstract: The paper analyzes the process of professional socialization. The author explained the socializing influence of institutions on the identity of students. The fact of constant transformation of the socio-professional norms was stressed. The quantitative and qualitative characteristics of the degree of socialization of personality were described. The concepts of general cultural and social competence were compared. Socio-professional competence was interpreted as professional socialization of students in university. The main elements of students' professional socialization were described.

page 43-45

Architecture and Construction

S.V. Chizhov, S.A. Kuznetsov

On Concrete Shrinkage Forecast

Key words and phrases: shrinkage; concrete; modeling.

Abstract: Monolithic reinforced concrete bridge pillars have been actively used since the 1930's. From the beginning of their use, they have proved to be less labor intensive, compared with stone pillars and rubble supports, and reliable structures. However, despite all their good qualities, these elements have disadvantages. They tend to form cracks that appear as a consequence of excessive external loads, and not well-proven production technology of concreting works and maintenance system designs. The paper reviews the existing methods of concrete shrinkage forecast, the impact of production technology and operation of bridge pillars on the amount of shrinkage stress and the extent of cracks.

page 46-49

History, Philosophy and Sociology

E.G. Kapustina

Communicative Strategies in the System of Interaction between State Authorities and Youth

Key words and phrases: youth; generation; public institutions.

Abstract: The current political situation in Russia involves understanding of social processes occurring in the youth environment, social attitudes and preferences of young voters, their role in the political process at the various levels of governance.

page 50-52

T.B. Malinina

Culture as Information System

Key words and phrases: culture; information interaction; system of values.

Abstract: The formation of cultural values occurs in the process of information interactions which are the most important component of the culture of society. Human vital activities take place in cultural environments where information circulates. The unity of information universe and samples of cultural activities form an information system of culture.

page 53-57

V.R. Matveeva

Possible Ways of Application the World – System Approach when Studying Passenger Transport of Bashkiria of the Soviet Period

Key words and phrases: A.G. Frank; I. Wallerstein; world-system approach; world-economy, periphery, semi-periphery; development and “underdevelopment”; F. Brodel; kernel. *Abstract:* This paper is an attempt of adaptation of some provisions the world-system approach to understanding of the historical process (A.G. Frank, I. Wallerstein, F. Brodel) to a subject of formation and development of passenger transport system of Bashkiria of the Soviet period. The study will be of interest both to scientists, and a wide range of readers who are interested in the history of cities of Bashkiria.

page 58-63

E.F. Moroz

National Security of Russia and Methods of its Strengthening (Socio-Philosophical Analysis)

Key words and phrases: national security; education; educational policy; education system.

Abstract: The concept of security deals with the widest set of aspects of modern society. The state of national security in strategic aspect depends on the state of education system. It is impossible to ensure military and economic security of the country without sufficient qualified personnel. Fundamental adjustments to a number of core areas of education policy can ensure national security at the level adequately meeting all the challenges of the modern world

page 64-67

A.I. Osina

Brain Drain in the Era of Globalization

Key words and phrases: “brain drain”; globalization; staff circulation; international and national school of studying migration; brain drain of scientists; long-term scientific visits abroad; protectionist policy on high-tech industries; Russia’s lag behind the leading countries; attracting experienced and demanded scientists by working with scientific diasporas.

page 68-71

Abstract: This paper deals with the concept of “brain drain” and gives an estimate of the process of globalization on the basis of different theories - international and national school of studying migration processes. Most of the work is devoted to the process of “brain drain”, characteristic of modern Russia and other countries, their advocate protection policy on high-tech industries. The author analyzes the gap between Russia and leading countries and evaluates the phenomenon of “brain drain” in the period of globalization. The experience of China in attracting professionals to their homeland is studied in this paper.

S.S. Pravoslavskiy

Historical and Philosophical Roots of Systemic Approach to Society Research

Key words and phrases: society; sociogenesis; social philosophy; social systems theory.

Abstract: This paper focuses on the main theoretical alternatives in modern social thought concerning the systemic character of sociogenesis. Three main theoretical approaches expressed in social contract theories, Hegelian, Marxist and positivist thought are analyzed in the paper. This analysis shows the continuity and valuable status of these approaches for contemporary society researches. The author makes a conclusion about the possibility of these approaches integration, which requires further research into historical and philosophical thought.

page 72-74

Philology

K.S. Overina

Anton Chekhov's Early Crime Stories (The Problem of Narration and Genre)

Key words and phrases: Anton Chekhov; history of Russian literature; intertext; narrative; popular literature; reader-response criticism.

Abstract: The author discusses the problem of narration and genre in Anton Chekhov's early crime stories. One of the most essential and complicated narratological categories for crime stories (or detective stories) is the category of event, which was very important for Chekhov's early prose. The analysis of the narrative structure, composition and genre features of early Chekhov's texts shows that the author replaced the event from fictional world level into that of communication between the reader and text. As a result, the text deeply influences its audience, provides readers' compassion for a character, who may easily turn out to be a victim, rather than a criminal. Besides, in a single text Chekhov could combine different stylistic and genre features to form a specific readers' response.

page 75-79

O.V. Pavlova

Phraseological Potential of Phrasemes Elements in the Chinese and Russian Languages

Key words and phrases: internal form; national-cultural specifics; phraseological units.

Abstract: In this paper, the author made an attempt to compare phraseological potential of Russian and Chinese lexemes, so as to check the frequency of a lexeme within the phraseological unit. On the basis of data generalization, lexical analysis of the phrasemes elements (an internal form of a phraseological unit) the author identified the national specificity of the considered phraseological units. The list of most frequent basic lexemes observed in the two languages illustrates the way of living of Russians and the Chinese.

page 80-83

D.E. Perekopny

Construction and Functioning of Thesauruses

Key words and phrases: electronic commerce; EC; information retrieval systems; IRS; linguistics; thesaurus.

Abstract: Construction of the electronic commerce (EC) thesaurus requires a sufficient amount of texts from the Russian-speaking sector of the Internet for their frequency analysis. The completeness of the sample determines the text parameters for thesaurus construction. As the sample increases, a set of elements of information flow system becomes saturated. To calculate the vocabulary and sample size the author uses the criterion of vocabulary saturation. The Text Analyst program, enabling to define semantic links in the studied text gives an opportunity to form fragments of a semantic network. Text Analyst allows not only optimizing process and quality of search, but also opens the wide horizons for the application of EC thesauruses in the information retrieval systems (IRS). In the paper, the algorithm of EC thesaurus construction, which is the basis of modern information retrieval systems, is offered.

page 84-88

Mathematical Methods and Models

D.B. Vladimirova, A.L. Derevyankina

Selecting an Optimal Construction Design for Heating Element in the Task of Stabilization of the Drawing Process of Optical Fibers

Key words and phrases: drawing of optical fibers; stability.

Abstract: The paper shows a significant dependence of stability of drawing process of quartz fibers on the nature of the temperature distribution in the furnace. To obtain this result the system of differential equations describing one-dimensional process of drawing was solved. The influence of the relative width of the heating element on the stability of the drawing process was studied; and the values of this parameter to ensure the stability of the drawing process were calculated.

page 89-92

A.R. Davydov, U.V. Zakirova, N.N. Ogorodnikova

Statistical Comparative Analysis of Energy Efficiency of World Countries Economies

Key words and phrases: energy efficiency of economy; statistical research; cluster analysis; regression analysis.

Abstract: Statistical research into energy efficiency of world countries economies is done with the use of cluster and regression analysis methods.

page 93-95

A.S. Denisenko

Factor Analysis and Integral Estimates of Industry Involvement in Money Laundering

Key words and phrases: method of principal component dimension reduction; factor analysis; countering legalization (laundering) of proceeds from crime and terrorist financing; risk assessment.

Abstract: The paper deals with an approach to risk assessment based on the principal components analyses in anti-money laundering enforcement actions in national economy industries. The research shows the way to assess the money laundering risk associated with the smuggling in Far East fishing industry. The significance of the research is driven by FATF recommendation (about risk-based approach applying in AML/CFT system). Scientific novelty is based on applying mathematical methods to the problem of risk assessment in AML system.

page 96-100

S.Yu. Kultyshev, L.M. Kultysheva

Interpolation in Banach Spaces and Prognosis of Real Objects Behavior

Key words and phrases: interpolation; Banach spaces; prognosis; real objects.

Abstract: The authors propose a method of forecasting the behavior of objects possessing the property of repetition. This method is based on building interpolating operators in Banach spaces of vector-functions determined on the finite segment.

page 101-104

E.A. Nikitina, T.F. Pepelyaeva

Application of Statistical Methods in Scoring when Issuing Microloans through the Internet Project

Key words and phrases: scoring models; reference portfolio; micro-loans; cluster analysis; logistic regression.

Abstract: On the basis of statistical methods the authors developed a scoring model of the Internet-project, which specializes on issuing microloans. The stages of the construction of the scoring model were described.

page 105-107

E.V. Semenova, T.A. Osechkina

Research into Dependence of Captive Market Share on Marketing Performance and Product Demand

Key words and phrases: optimal control; linear function of demand; marketing performance; product share in the market; profit maximization; optimal price; sensitivity study.

Abstract: We studied the dependence of the captive market share on marketing performance and linear demand function; a general solution of the problem was found; the sensitivity of the solution to the model parameters was investigated.

page 108-111

T.F. Pepelyaeva, V.Yu. Ivankin

Simulation of Interaction of Surfaces under Honing

Key words and phrases: billet profile; tool profile; calculation of profile parameters; simulation; parameters of surface roughness.

page 112-115

Abstract: The authors proposed to examine the interaction of surfaces at the level of micro-profiles of billets and tools. The profile of a tool is calculated by the parameters of abrasive material, and the profile of billet is obtained by repeated imposition of the part of the tool profile to the initial profile of the billet.

E.Yu. Vorobyeva, G.A. Pushkarev

On Boundary-Value Problem for a Quasi-Linear Functional-Differential Equation

Key words and phrases: functional-differential equation; boundary-value problem.

Abstract: We found a sign of the existence of solution and a sign of the existence of unique solution of a nonlinear boundary value problem $(\Lambda x)(t) = f\left(t, \int_a^b x(s) d_s R_0(t, s)\right)$, $t \in [a, b]$
 $x(a) = \alpha$, $x(b) = \beta$ in the following assumptions:
operator $\Lambda: W^2 \rightarrow L$ is defined by equality
 $(\Lambda x)(t) = x''(t) + \int_a^b x(s) d_s R_1(t, s)$, functions
 $R_1: [a, b] \times [a, b] \rightarrow R^1$ and $R_0: [a, b] \times [a, b] \rightarrow R^1$
are measurable in the square $[a, b] \times [a, b]$; complete
variations $\int_{s=a}^h R_1(t, s)$ and $\int_{s=a}^h R_0(t, s)$ are integrated
in absolute value on $[a, b]$; $R_0(t, s)$ not decreasing s
in almost all $t \in [a, b]$; function $f: [a, b] \times R^1 \rightarrow R^1$
satisfies the conditions of the Caratheodory spaces:
 $f(t, u)$ measurable in t at all u and continuous u for
almost all $t \in [a, b]$.

page 116-120

Information Science

A.V. Markeeva

Development of Crowdsourcing Projects in Russian Companies

Key words and phrases: crowdsourcing; crowdsourcing projects; crowdsourcing in Russian companies; innovation; types of crowdsourcing.

Abstract: The paper describes theoretical aspects of crowdsourcing. The author considers the types of crowdsourcing, analyzes crowdsourcing projects of Russian companies.

page 121-127

A.S. Stol, Yu.A. Reznichenko

Application of Convolutional Neural Networks to Synchronize Imaging Results

Key words and phrases: convolutional neural networks; image processing; medical studies synchronization; GPGPU; CUDA; OpenCL.

Abstract: This paper discusses the possibility of using convolution neural networks to synchronize multiple series of images. It is hypothesized that even untrained convolution neural network can effectively perform this task. The author demonstrates the architecture of the created neural network, the results of experiments, confirming the assumptions made, and the evaluation of results.

page 128-133

Ecology and Nature Management

V.M. Lukashevich, L.V. Shchegoleva

Methodology of Forest Development Planning Given Seasonality of Logging

Key words and phrases: winter forest resources; forest roads; logging; planning methodology; seasonality.

Abstract: The proposed method of planning takes into account the criteria influencing the duration of operation of winter roads, logging rhythm and risks arising from the seasonal development of forest areas.

page 134-136

Economic Sciences

M.E. Voskanov

Specifics of Formation of the Mechanism of Effective Management of Macroeconomic Socio-Economic System (Case Study of Southern Macroeconomic Region of Russia)

Key words and phrases: macroregion; management mechanism; regional economy; socio-economic system.

Abstract: The paper describes the specifics of formation of the mechanism of effective management of macroeconomic socio-economic system. The Southern macroeconomic region of Russia is studied. The strategy of effective management of socio-economic system of the Southern macroeconomic region of Russia in conditions of crises requires specific, anti-recessionary tools which are considered in this paper.

page 137-139

V.A. Makeev

Investment-Speculative Portfolio: Modern Approach in Money Investment Management

Key words and phrases: stock market; investments; speculations, securities; investment-speculative portfolio.

Abstract: The author theoretically grounds the tendencies of transformation of the investment portfolio into speculative-investment portfolio, gives its definition, classification by measures of risk and its possible structure. The causes of insufficiency of classic investment portfolio and long-term "buy & hold" strategies and their inherent risks were examined. The possibility of reaching consensus in using investment and speculative strategies to balance investment-speculative portfolio and enhance the growth of profitability calculated per unit of risk level was analyzed; the ultimate goal is to increase attractiveness of the investment company by exceeding classic portfolio and benchmark stock index.

page 140-144

D.V. Makhnev

Genesis of Views on the Role of Innovations in Economy

Key words and phrases: innovation theory; innovation development; innovation system.

Abstract: The history of generation of views on the role of innovations in economy is considered in the paper. The theory of innovation evolution is considered through distinguishing three historical periods, the main scholars and their works are reviewed within the framework of the distinguished periods. Conclusions about the role of innovations in the modern economy are made.

page 145-151

T.L. Bezrukova, A.O. Ryzhkov

Analysis of Tax Provision of Modern Enterprise Investment Activity

Key words and phrases: investment activity; innovation; R&D tax system.

Abstract: The author clarified the features of investment activity of a company through the case study of OJSC "NLMK" in current conditions; these were complemented by qualitative indicators including the implementation of activities in the investment environment, innovation orientation of investment resources used by effective owners to ensure expanded reproduction.

page 152-154

R.V. Fedorenko

On the Options for Interaction of Foreign Trade Participants with Customs Authorities

Key words and phrases: foreign trade; customs services; customs administration; customs broker; freight forwarder.

Abstract: The paper considers three main options for interaction between foreign trade participants and customs authorities. The role of customs brokers in customs services organization is examined. The possibility of involvement a complex freight forwarder to provide foreign trade is studied.

page 155-158

Legal Science

G.A. Marzak

On Legislation Defects

Key words and phrases: legislation defects; legislation gaps; conflict of laws; rule of law; regulation; legislation; legal drafting methodology.

Abstract: The paper discusses the problem that has developed in legislation in current conditions. The special position of normative legal acts of the Russian legal system cannot be denied. Because of this, it is necessary to pay special attention to the legal phenomenon "legislation defects". The author examines theoretical questions of the notion under study and offers its definition, as well as possible ways to improve the legislation and law enforcement to resolve this problem.

page 159-161

Political Science

M.-E.Kh. Shamsuev

North Caucasus Conflict: Ensuring Information Security in Multicultural Macroregion

Key words and phrases: identity; information security; international relations; North Caucasus; conflicts.

Abstract: The paper deals with inter-ethnic conflicts in the North Caucasus in the context of information security of multicultural macroregion. The results of the poll addressing a number of problems of interethnic relations have been discussed. An attempt to define the role of information security in reducing ethnic conflicts in the region has been made.

page 162-166