

Biological Sciences

O.A. Kononova

Syktvykar State University, Syktvykar

The Estimation of Vital Structure of *Gentiana Cruciata L.* of Natural Cenopopulations in the Vologda Region

Key words and phrases: cenopopulation; *Gentiana Cruciata L.*; rare species; Vologda Region; vitality spectrum.

page 7-12

Abstract: The paper describes the characteristics of the vitality spectra of two cenopopulations of species of *Gentiana Cruciata L.* rare for the Vologda region. The results of the research indicate that the prevalence of individuals with lower vitality class in the cenopopulations is not an indicator of their depression.

Pedagogy and Psychology

M.A. Derkacheva

Russian Presidential Academy of National Economy and Public Administration, Moscow

Educational Value of Foreign Language Advertising Slogan in the Process of Professional Communication of Students Majoring in Advertising and Public Relations

Key words and phrases: axiology; communicative success; cultural conceptual sphere; foreign language advertising slogan; recipient, target audience.

page 13-15

Abstract: The paper deals with the educational value of foreign language advertising slogan in the process of professional communication. The author studies a foreign language advertising slogan as an element of pop culture and an incentive for respect and tolerance towards another culture and another way of life, acquaintance with an unusual system of moral values and the specific mentality of linguistic community

N.A. Zabrodina, M.Yu. Stozharova

I.N. Ulyanov Ulyanovsk State Pedagogical University, Ulyanovsk

The Development of the Bases of Preschoolers' Logical Thinking Using a Modeling Method (Mathematics Material)

Key words and phrases: logical operations; logical thinking; model; modeling; preschooler.

page 16-21

Abstract: This paper is devoted to the use of a modeling method in modern science, in particular, in preschoolers' training in elementary mathematics. The psychology and pedagogical analysis of this problem is given. The examples of a modeling method in preschoolers' mathematical activity are given.

D.A. Ionova

I.Ya. Yakovlev Chuvash State Pedagogical University, Cheboksary

Inclusion of Younger Teenagers in Social Projects as a Condition of Developing Managerial Skills

Key words and phrases: education; social development; head teacher; organizational skills.

page 22-25

Abstract: The paper deals with the development of managerial skills in younger adolescents in educational organization. Social project work conducted by younger teenagers is considered as a condition for the development of their managerial skills.

T.V. Kirillova, O.V. Kirillova, E.A. Abulgazimov

Academy of Law and Management of the Federal Penitentiary Service of Russia, Ryazan;

I.N. Ulyanov Chuvash State University, Cheboksary;

Almetyevsk State Petroleum Institute, Almetyevsk The Formation of Ethnic Socialization and Tolerance of Students in Multicultural Educational Space

Key words and phrases: ethnic; multicultural educational space; inter-ethnic and intercultural dialogue; tolerance; ethnic socialization of children and adolescents; ethno-cultural competence.

page 26-28

Abstract: This paper explores the structural elements of ethnic socialization of students, characteristics of multicultural educational space and its significance for the formation of ethnic socialization and tolerant relations of students from different ethnic groups.

M.E. Kozlovskikh

Shadrinsk State Pedagogical Institute, Shadrinsk

The Structure and Content of General-Purpose Health Saving Activities in the Context of Teaching Computer Science at School

Key words and phrases: computer science teaching; general-purpose health saving activities.

Abstract: The concept of “general-purpose health saving activities” is analyzed. The paper points out the enlarged groups of health saving activities: those related to the rational arrangement of educational and free time activities in the conditions of work with a computer equipment, activities focused on the organization of health saving information environment with the use of ICT tools, actions aimed at monitoring health by using hardware and software. The offered structure of the health saving activities in the context of computer science teaching includes value-motivational and cognitive-activity components. The general-purpose health-saving activities are implemented in specific functions: cognitive, communicative, adaptive, normative, evaluative-informative, regulatory, developmental.

page 29-32

T.A. Lavina, E.A. Kozlova

I.Ya. Yakovlev Chuvash State Pedagogical University, Cheboksary

Methodological Approaches to Training Technologists of Light Industry Products to Use Information and Communication Technologies

Key words and phrases: methodical system of education; learning objectives; teaching content; teaching methods; forms and means of teaching.

Abstract: The paper describes the main functions of a light industry technologist and the need to train technologists to use of information and communication technologies (ICT) in their professional activities. The methods of educational system (MES) were analyzed. We identified the five interrelated components of MES: learning objectives, teaching content, teaching method, form and means of learning. When training light industry technologists to use ICT, the main methodological approaches must be used in the educational process. We formulated the learning outcomes of technologists’ training, determined the content of the students’ learning methods and forms of training. We described the main hardware and software tools that are needed when training students for the major educational program “Technology of light industry products”.

page 33-36

R.Yu. Fedorov

Perm Military Institute of Internal Troops of the Ministry of Internal Affairs of the Russian Federation, Perm

On the Role of Tasks in the Structure of Credit Rating System for Technical Disciplines at Higher Education Institution

Key words and phrases: credit rating system; higher school; task; technical disciplines.

Abstract: Training in technical disciplines in the conditions of credit rating system is quite complicated. The complexity is manifested in the prism of the tasks set within educational process and realization of technical innovations applied in the military service. In the paper, special attention is paid to the problems of key research tasks related to the formation of the professional and specialized competences acquired through studying technical disciplines.

page 37-42

Professional Training

A.Z. Ibatova

Surgut Branch of Tyumen Oil and Gas University, Surgut

Preparedness to Professionally-Oriented Communication as a Feature of Communicative Culture of an Individual in Professional Training

Key words and phrases: communicative readiness; communicative personality; speech culture; readiness; communication.

Abstract: The paper deals with the essence of readiness to professionally-oriented communication in a foreign language, defines the concept of communicative culture of a person and its place in the structure of professional education.

page 43-45

T.A. Fugelova

Tyumen State University, Tyumen

The Implementation of Technology Imitation and Role Modeling in to Develop Professional Mobility of Specialists

Key words and phrases: professional mobility; technology of imitation and role modeling; collective creative activity.

page 46-48

Abstract: The paper discusses the importance of career orientation and support to future engineers in understanding the prospects and challenges of professional career. It is important to develop readiness of future engineers for professional development, willingness to be responsible for their professional future and be ready for constant development. This requires a specially organized work on the formation and development of professional mobility.

History, Philosophy and Sociology

N.L. Antonova

Ural Federal University named after the first President of Russia Boris Yeltsin, Yekaterinburg

Health-Saving Culture: Sociological Conceptualization

Key words and phrases: health; health-saving practices; health-saving culture; outlook; need; socialization; values.

page 49-51

Abstract: The paper presents sociological interpretation of the concept of health-saving culture as an integrative phenomenon. The principles of its formation and reproduction are highlighted; the role of agents of socialization in the development of health-saving culture is defined.

M.A. Barikhina

M.V. Lomonosov Moscow State University, Moscow

Creativity as a Research Object of Sociology of Science in the Context of the Problem of Social Modernisation

Key words and phrases: creativity; sociology of creativity; creative class; sociology of science; modernisation.

page 62-67

Abstract: The paper describes the key components of the concept “creativity”. Also, this paper provides a detailed description of several levels of analysis of this phenomenon – model 4P’s. The paper describes the main approaches to the consideration of creativity from the historical perspective. The paper describes different types of creativity in terms of its impact on the state of the social system- individual creativity, art and science. The analysis of the role of a scientist as the main subject of scientific creativity and, consequently, fundamental social changes has been conducted. The paper proves the necessity of sociological focus on the innovative activity of scientists in the context of the problem of social modernisation.

V.A. Valeeva, E.G. Kostyleva, Yu.B. Kozlova

Ufa State Petroleum Technological University, Ufa

Young People in the Post-Soviet period: Problems and Trends

Key words and phrases: changes; young people; moral and ethical values; education; post-Soviet period; problems of modern society; work.

page 68-72

Abstract: On the basis of the analysis of statistical research we studied such changes in the youth environment in the post-Soviet period as an attitude to the situation in the country, to work and education.

L.Ch. Khablieva, Z.A. Kuchieva

K.L. Khetagurov North Ossetian State University, Vladikavkaz

Ideology and Propaganda in the North Caucasus during the Great Patriotic War

Key words and phrases: propaganda; ideology; internationalism; multi-confessional; patriotism.

page 73-76

Abstract: The paper considers the questions of ideology and propaganda in the North Caucasus during the great Patriotic war. On the basis of archival material we showed the characteristic directions of this work, with regard to the multinational and multi-confessional composition of the population of the region.

Philology

M.V. Badelina, V.A. Falina

Surgut Branch of Tyumen State Oil and Gas University, Surgut;

V.I. Lenin Ivanovo State Power Engineering University, Ivanovo

The Relevance of a Resume as a Special Genre of Business Communication

Key words and phrases: business communication; professional communication skills; resume.

page 77-80

Abstract: The paper is devoted to the experience of teaching students writing a resume at V.I. Lenin Ivanovo State Power Engineering University and Branch of Tyumen State Oil and Gas University in order to identify the most important aspects of writing resumes given the specific features of training.

M.A. Zaverukha

Institute of Humanitarian Education and Information Technologies, Moscow

Dictionary Entry as the Core of a Multi-Structural Dictionary Organization

Key words and phrases: corpus (the body of the dictionary); dictionary; entry; entry structure; glosses (labels); headword; lemma; macrostructure; megastructure; microstructure; references.

page 81-86

Abstract: The paper deals with the dictionary structure and its main elements: mega-, macro- and microstructure. Special attention is given to a dictionary entry as the core component of the dictionary. The author claims that the structure and the content of the dictionary entry depend on the type of dictionary and its target purpose.

L.A. Yushkova

Udmurt State University, Izhevsk

Specificity of Motivational Links in the Colloquial Word-Formation (Case Study of German Colloquial Verbal Lexis)

Key words and phrases: colloquial lexis; word-formation motivation; derivatives; derivational stem; idiomatycity; reduction of stems; word-formation metaphorization; homonymy of stems; word-formation analogy.

page 87-90

Abstract: The paper concerns the definition of the degree of morphosyntactic motivation between the derivational stem and its derivatives. Taking derivative verbs in the German colloquial lexis as an example, we determine and analyze the factors complicating the motivational links in the derivative word, as well as the opposite factors promoting understanding of motivational links, their character, and the meaning of a derivative word. The description of these factors is considered to be a precondition for development of the criteria which would make it possible to differentiate the degrees of word-formation motivation, especially in the group of partially motivated derivative words. The necessity of differentiating several types of motivation for the purposes of word-formation analysis is stressed and the hindering factors are pointed out.

Engineering

M.S. Kazantsev, N.S. Vasilyev

St. Petersburg National Research University of Information Technologies, Mechanics and Optics, St. Petersburg

The Evaluation of the Time Required to Create a CNC Machine Program Using Modern CAM Systems

Key words and phrases: CNC; NC program; CAM system; working time evaluation.

page 91-94

Abstract: The paper describes a process of evaluation of time required to create an NC program for lathe, mill and mill-turn multi-task CNC machines. It is spoken in details about dividing the work process into steps, determination of the factors that influence the process and unification of geometric features of a part.

Mathematical Methods and Models

E.V. Bessarabova

Sevastopol State University, Sevastopol

Geometric and Physiological Features of Irradiation Fields Occurrence

Key words and phrases: corpus irradiation field; interzones; field-forming elements; repeller; attractor; field size; irradiation orientation; field congruence; immersion space.

Abstract: The purpose of research is to substantiate the hypothesis of the existence of the field of irradiation resulting from visual perception of objects. The irradiation field is an energy field formed on the retina of the eye under the influence of light rays. The paper describes the basic principles of occurrence of irradiation in terms of physics and physiology. A structured geometric model of the field of irradiation, which describes the physical phenomenon of nature field with further geometrical formalization, is described. Formalization is aimed at displaying a plurality of components of the field of irradiation on the multiple components of geometric models.

page 95-98

D.Yu. Ivanov

Moscow State Mechanical Engineering University, Moscow

The Analysis of Two-Dimensional Boundary Integral Equations Defining the Solutions of Heat Conduction Problems in Direct Cylinders

Key words and phrases: boundary integral equation; existence; heat conduction; regularity; uniqueness.

Abstract: We consider two-dimensional boundary integral equations, which determine the solutions of the initial-boundary value problems for the homogeneous heat equation in a uniform direct cylinder using the vector potential. Sustainable unique solvability of such integral equations in spaces of functions of different smoothness is proven.

page 99-102

M.S. Konstantinov, Nguyen Dien Ngoc

Moscow Aviation Institute, Moscow

Designing of Interplanetary Trajectory with the Possibility of Countering Disturbances Caused by Temporary Abnormal Shutdown of the Engine

Key words and phrases: spacecraft; unintended shutdown of the engine; trajectory optimization; electric propulsion system.

Abstract: The paper proposes a design method of interplanetary trajectory of the spacecraft (SC) with the electric propulsion (EP) with the possibility of countering disturbances caused by unintended shutdown of EP on the heliocentric trajectory. The main result of this study is a qualitative analysis of the possibility of countering the spacecraft's trajectory perturbation caused by unintended shutdown of EP by increasing the duration of the passive segment at the end of interplanetary trajectory.

page 103-109

Electronics, Measuring Equipment, Radiotechnics and Communication

S.G. Nikiforov

LLC "Arhlight", Moscow

Photometric and Radiometric Methods of LED Radiation Measurement

Key words and phrases: radiometer; spectral sensitivity; radiation spectrum; photometric method; luminous flux; LED; conversion factor.

Abstract: The paper is devoted to the measurement methods of optical characteristics of LEDs using photometric and radiometric sensors. It describes the problems, positive and negative aspects of using these methods, based on examples of their application in practice of the laboratory "Arhlight". The emphasis is put on the necessity of taking into account the spectral distribution of luminous flux (radiation power) measured sources with photometric measurements.

page 110-117

Management, Computer Engineering and Information Science

V.S. Simankov, A.N. Cherkasov

Institute of Modern Technology and Economics, Krasnodar

Synthesis Algorithm for Decision Support System as a Subsystem of the Situational Center

Key words and phrases: algorithm; synthesis; decision support system; intelligent system; integrated structure. page 118-122

Abstract: The paper describes the synthesis algorithm for constructing an optimal structure of decision support systems in the situation center on the basis of the relationship between the factors that characterize the problem and the target state of the control object.

D.V. Plakhin, I.V. Tsapko, S.G. Tsapko

National Research Tomsk Polytechnic University, Tomsk

Modern Methods and Means of Constructing Information Systems

Key words and phrases: information system; plug-in; data management; reference; database; SQL-query; directory.

Abstract: The availability of a large number of imported information systems on the Russian market creates greater dependence of Russian business on European and American suppliers of licensed software. This paper proposed approaches, as well as the methods and means to develop a complement to information systems and increase their functionality. As an example, we studied the process of developing a setting module of help system of a retail business. The structure of the software module allows configuring its work with a variety of information systems; the proposed approach allows extending the functionality of any information system for a given application scope. page 123-129

Economic Sciences

A.S. Ilyin

North-West Management Institute – Branch of Russian Presidential Academy of National Economy and Public Administration, St. Petersburg

Some Features of the Territorial Development of the Subjects of the North-West Federal District within the Eternization Model

Key words and phrases: macro region; the NWFD regions; eternization; techno-economic paradigm of regional economy; the level of development of the territory; trade and export structure; innovation; educational potential.

Abstract: The author have considered the possibility of using eternization model of territorial development at the macro-region – Northwestern Federal District. Taking into account the use of the territory as a resource for development, the usage of a system of regional socio-economic indicators has presents in the paper. It is proposed to use as an indicator of GRP, normalized to the area of the region. This paper presents the results of the comparative analysis of economic, commodity-export, innovation, technological and educational potential of the North-West regions. They are allowed to determine problem areas in development within the district and to rank the subjects by the criterion of willingness to use eternization model, as well as regions that are part of the Northwestern Federal District, to make recommendations and to increase the readiness of regions to changing technological base. page 130-137

S.S. Panteleev

Institute of Sustainable Development, Moscow

Flexibility as a Competitive Advantage Of Industrial “Product-Service” Systems

Key words and phrases: industrial system; production management; business-model.

Abstract: The paper describes the problems regarding flexibility of Industrial “product-service” systems and innovation business-models oriented to full satisfaction of complex client’s requirements. page 138-143

D.G. Rodionov, V.A. Degtereva

Saint-Petersburg Polytechnic University, St. Petersburg

Improvement of the Mechanism of Migration Processes Regulation in the Russian Federation to Ensure Economic Security

Key words and phrases: migration; migrant workers; the management of migratory activity.

page 144-153

Abstract: The paper discusses the features and problems of regulation of rights and status of migrant workers. Special attention is paid to the regulation of legal status of migrant workers in the Russian Federation. The author comes to the conclusion that it is necessary to redistribute the functions of state management of migration activities.

A.Yu. Stepanova, B.D. Sharaldaev

East Siberian State University of Technology and Management, Ulan-Ude

Formation of Innovation Policy of Limited Territorial-Spatial Entity

Key words and phrases: municipality; innovative development; strategy; management; socio-economic system.

page 154-157

Abstract: The paper discusses the formation of innovative strategic development of territorial entities, as well as there are identified approaches of innovation development of territorial-spatial entities.

N.S. Strelakova, D.A. Kuznetsov

Tambov State University named after G.R. Derzhavin, Tambov;

Academician I.P. Pavlov Ryazan State Medical University of Ministry of Health of Russia, Ryazan

Economic Prerequisites of Government Regulation of the Pharmaceutical Market

Key words and phrases: state regulation; pharmaceutical market; market economy.

page 158-161

Abstract: The paper described the main stages of the formation of the state regulation of the market, the relationship of the pharmaceutical market with the market economy; the conclusions on measures of the state regulation of the economy were made.

N.E. Yadova

N.E. Bauman Moscow State Technical University, Moscow

Innovative Project Management in the Development of Integration Processes

Key words and phrases: innovative project; project management; integration process; innovative product; innovative integration.

page 162-165

Abstract: The paper is devoted to the problems typical of the formation of the innovative business. The analysis of the development of innovative business, marked by its common and distinctive features in comparison with developed countries has been made. The necessity of developing and deepening the integration of innovative processes has been stressed

Legal Science

A.M. Zatsepin

Ural Branch of the Russian Legal Academy of the Russian Ministry of Justice, Yekaterinburg

Qualification of Crime Relapse

Key words and phrases: continuing crime; continuous crime; punishment; cumulative verdicts; Criminal Code; criminal record; intent; negligence; responsibility; deed; guilt.

Abstract: When qualifying the crime relapse and providing the imposition of punishment which occurs sometimes with a similar combination of crimes, the conclusion arises that a crime previously committed is the crime that has been committed before another one. Indeed, the practice proceeds from that when convicting of a person for a continuing crime or continuous crime, the crime that began before and has been continuing after issuance of the judgment in another case, by which this person has been convicted but has not served a sentence, the court must be guided by Article 70 of Russian Federation Criminal Code, when assigning punishment for the second verdict. As far as for assigning punishment on cumulative verdicts, the time of completing and not the time of commencing of the crime is important, so, it cannot be otherwise in the case of qualification of crime relapse.

page 166-170

D.S. Ryabchenko

Nevinnomyssk Institute of Economics, Management and Law, Nevinnomyssk

On Detecting Signs of Financial Irregularities in the Inspection and Enforcement Activities in Education

Key words and phrases: state financial control; regulatory activities; education; Rosobrnadzor; financial irregularities.

page 171-175

Abstract: The paper examines the interaction Rosobrnadzor and state financial control bodies in the exercise of supervisory activities in the field of education. The author describes the possibility to detect signs of financial irregularities in the control and supervision in educational organizations.

Proceedings of the 3rd International Scientific Practical Conference

«Challenges and Opportunities of Modern Science»

Social Economic Problems of Society Development

S-A.SH. DOVTAYEV, KH.M. MAKHMUDOV

Chechen State University, Grozny

Problems and Prospects of Development of Regional Agribusiness

Key words and phrases: agribusiness; agricultural production; communications; concentration and specialization; cooperation; regional agriculture; strategy of regional agribusiness development; structural policy in agriculture.

page 176-180

Abstract: The nature and essence of the problems encountered at the present stage of formation of regional agribusiness demonstrates the need to develop planning decisions, pursue a common policy of coordinated development of its elements.

Yu.V. Panko, E.N. Donskaya

Balakovo Institute of Economics and Business – Branch of Plekhanov Russian University of Economics, Balakovo

The Need for Restructuring of Modern Education System Institutions in a Competitive Environment

Key words and phrases: capital of knowledge; competition; mesoeconomics; educational process; educational innovations; human capital; market of educational services.

page 181-185

Abstract: The purpose of the research is identification of tendencies and features of development in the modern market of educational services in conditions of intense competition and an increasing role of human resource. The retrospective analysis of the development of the educational services market is carried out and the assessment of the compliance of the educational services market to conditions of modern economic system is given. The conclusions are the conceptual bases for restructuring of modern education system institutes.

Modern Environmental Problems

M.M. Sangadzhiev, B.V. Berikova, B.M. Indzhieva

Kalmyk State University, Elista

Geological and Environmental Factor: Kalmyk National Cuisine and its Impact on Human Health

Key words and phrases: geological and geographical factors; Kalmykia; national cuisine; meat; vegetarian food; nutrition athletes.

page 186-190

Abstract: The paper considers the issues of food and its impact on human health and its connection with geological and modern environmental factors that are observed in the inhabitants engaged in cattle-breeding. The authors studied the national food of the Kalmyks and its connection with the drinking water in Kalmykia. A brief description of the occurrences of diseases on the territory of the Republic was given.

*L.I. Khokhlova, M.M. Sangadzhiev, V.A. Onkaev, N.L. Mudzhikov
Kalmyk State University, Elista*

The Dust Content in the Air of Workplaces Located in Open Areas (Case Study of the Republic of Kalmykia)

Key words and phrases: dust; jobs; the Republic of Kalmykia; disease; population; road network.

page 191-193

Abstract: The paper examines the impact of dust on the quality of air in the working areas during construction of roads in the Republic of Kalmykia. Kalmykia has difficult geological and environmental conditions conducive to the emergence of specific diseases of the population. The authors gave a brief description of desertification issues with the road network and, in general, the territory of the republic.

Modern Philology Problems

M.A. Zaverukha

Institute of Humanitarian Education and Information Technologies, Moscow

Professional Linguistic World-Image and its Reflection in Legal English

Key words and phrases: language for specific purposes; legal English; legal system; legal world-image; linguistic world-image; professional linguistic world-image.

page 194-196

Abstract: The paper reveals an interaction between linguistic world-image and professional linguistic world-image, especially in the field of jurisprudence. Along with the linguistic world-image, peculiar to the native speakers of a language, there is also a special world view of the specialists. The author emphasizes the direct relationship between the particular features of professional world-image of the lawyers and the differences in the legal terminological systems of different legal communities.

Pedagogy and Psychology

E.V. Kopytova

Tyumen State Oil and Gas University, Tyumen

Diagnostics of Level of Ecological Thinking of the Population of the Tyumen Region

Key words and phrases: ecological culture; ecological thinking; ecological consciousness; emotions; sotsioekologicheskyy behavior.

page 197-199

Abstract: According to the results of the sociological research presents an analysis and found the level of ecological thinking inhabitants of the Tyumen region, the use of which in terms of the principles of environmental education, ecological consciousness among ekodeyatelnosti and gives an opportunity to form a mechanism for its increase.