

International Summer School

***“Computer Science Evolution and
Green Technologies”***



31 August – 7 September

Book of Abstracts

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Mrs. Maria Tsironi, PhD Candidate
Mrs. Rozita Tsoni, PhD Candidate
Mrs. Liu Xia, PhD Candidate

Program

Monday, August 31, 2015

17:00 – 18:00	Arrival, Registration of participants
18:30 – 19:30	Welcome addresses <ul style="list-style-type: none">• "Hellenic Quality Assurance and Accreditation Agency (HQA): the assessment of study programs", Prof. Ioannis Gerothanassis, <i>Vice-President of HQA, Former Rector of the University of Ioannina, Gr</i>• "Digital Learning Objects: A Green Technologies Approach to Education", Prof. Anastasios Mikropoulos, <i>Dean of the School of Education, University of Ioannina, Gr</i>• "Summer Schools for learning and professional development", Prof. Jenny Pange, <i>Director of Lab of New Technologies and Distance Learning, University of Ioannina, Gr</i>
20:00	Welcome Reception

Tuesday, September 1, 2015

09:00 – 13:00	Place: Lyceum of Konitsa and Foundation "Klearhos Papadiamantis" Lectures on: "Life Long Learning, Open Learning and green technologies" <ul style="list-style-type: none">• Ass. Prof. Eugenia Toki• Prof. Andrei Lvovich Podolsky
13:30 – 15:00	Light Lunch
15:00 – 18:00	Data collection for the workshop 1 Place: Center of Environmental Education in Konitsa
19:00 – 20:00	Workshop 1 Short talks and group discussion will focus on the topic: <i>ICT applications for Green Technologies</i> Supervisor: Christina Toki, PhD, Associate Researcher Assistants: Konstantinos Plachouras, TEI of Epirus, Maria Tsironi PhD student
20:30	Dinner

Wednesday, September 02, 2015

09:00 – 13:00	Place: <u>Lyceum of Konitsa and Foundation "Klearhos Papadiamantis"</u> Lectures on: "ICT use and Green technologies today" <ul style="list-style-type: none">• Prof. Andrei Lvovich Podolsky• Ass. Prof. Evangelos Evangelou
13:30 – 15:00	Light Lunch
15:00 – 18:00	Data collection for the workshop 2 Place: <u>Aoos River, Bridge</u>
19:00 – 20:00	Workshop 2 Short talks and group discussion will focus on the topic: <i>ICT tools for Environmental Use</i> Supervisor: Associate Professor Mr. Evangelos Evangelou Assistants: Eftychia Kalogianni, Athanasios Sypsas, PhD students
20:30	Dinner

Thursday, September 03, 2015

09:00 – 13:00	Place: <u>Lyceum of Konitsa and Foundation "Klearhos Papadiamantis"</u> Lectures on: "Distance education - Games and ICT tools for environmental studies" <ul style="list-style-type: none">• Prof. Costas Tsolakidis• Prof. Jenny Pange
13:30 – 15:00	Light Lunch
15:00 – 18:00	Data collection for the workshop 3 Place: <u>Visit to wetland</u>
19:00 – 20:00	Workshop 3 Short talks and group discussion will focus on the topic: <i>Using Distance education and ICT tools for Environmental Studies</i> Supervisor: Professor Mr. Costas Tsolakidis Assistants: Aspa Lekka, Maria Tsironi, PhD students
20:30	Dinner

Friday, September 04, 2015

09:00 – 13:00	<p>Place: <u>Lyceum of Konitsa and Foundation "Klearhos Papadiamantis"</u></p> <p>Lectures on: "Environmental Education and The pedagogical dimension of green technologies"</p> <ul style="list-style-type: none">• Prof. Gerasimos Kekkeris• Prof. Antonis Lionarakis• Ass. Prof. Maria Sakellariou
13:30 – 15:00	Light Lunch
15:00 – 18:00	<p>Data collection for the workshop 4</p> <p>Place: <u>Visit to local schools – Anagnostopouleios School</u></p>
19:00 – 20:00	<p>Workshop 4</p> <p>Short talks and group discussion will focus on the topic: <i>Technology, Environment, Pedagogy</i></p> <p>Supervisor: Professor Mr. Gerasimos Kekkeris</p> <p>Assistants: Ioannis Balouktsis, Konstantina Karameri, PhD students</p>
20:30	Dinner

Saturday, September 05, 2015

09:00 – 13:00	<p>Place: <u>Lyceum of Konitsa and Foundation "Klearhos Papadiamantis"</u></p> <p>Lectures on: "Media technologies for environmental awareness"</p> <ul style="list-style-type: none">• Ass. Prof. Nikoletta Tsitsanoudis Mallidis• Lecturer Spyros Siakas
13:30 – 15:00	Light Lunch
15:00 – 18:00	<p>Data collection for the workshop 5</p> <p>Place: <u>St. Barbara</u></p>
19:00 – 20:00	<p>Workshop 5</p> <p>Short talks and group discussion will focus on the topic: <i>Creating educational activities using interactive video for environmental issues</i></p> <p>Supervisor: Assistant Professor Mrs. Nikoletta Tsitsanoudis-Mallidis</p> <p>Assistants: Rozita Tsoni, Maria Tsironi, PhD students</p>
20:30	Dinner

Sunday, September 06, 2015

09:00 – 13:00	<p>Place: <u>Lyceum of Konitsa and Foundation "Klearhos Papadiamantis"</u></p> <p>Lectures on: "Green Tourism and Expert Systems"</p> <ul style="list-style-type: none">• Prof. Nikitas Assimakopoulos• Prof. Tadeja Jere-Jakulin• Ass. Prof. Apostolos Gkamas
13:30 – 15:00	Light Lunch
15:00 – 18:00	Data collection for the workshop 6 Place: <u>Historic-touristic places: Hamkos' house or outdoor activities</u>
19:00 – 20:00	Workshop 6 Short talks and group discussion will focus on the topic: <i>Green Technology Approaches in Tourism</i> Supervisor: Professor Mr. Nikitas Assimakopoulos Assistants: Rozita Tsoni, Liu Xia, PhD students
20:30	Dinner

Monday, September 07, 2015

	<p>Place: <u>Foundation "Klearhos Papadiamantis"</u></p>
09:30 – 11:30	<p>Special Session</p> <ul style="list-style-type: none">• Good Practices in Lifelong Learning Programs• Presentation of the program 'COMMIT' (<i>The Social Dimension of Universities</i>), Prof. Jenny Pange <ul style="list-style-type: none">• Poster Session <p>Conclusions</p> <ul style="list-style-type: none">• Presentation of projects of Summer School• Evaluation - Discussion <p>Prof. Jenny Pange, Ass. Prof. Maria Sakellariou, Ass. Prof. Evangelos Evangelou</p>
11:30 – 13:00	
13:30 – 14:00	Awards - Closing ceremony

Tuesday, September 08, 2015

Place: University of Ioannina

Visit to University of Ioannina

Wednesday, September 09, 2015

Place: University of Ioannina

Visit to University of Ioannina

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Abstracts

A. Lectures

Digital Learning Objects: A Green Technologies Approach to Education

Professor Anastasios (Tasos) Mikropoulos, Dean of School of Education,
University of Ioannina, Greece

The goals of green technologies include sustainability, source reduction, innovation, viability and "cradle to cradle" design. The goal of "green Information and Communication Technologies (ICT)" is twofold. Firstly "green for ICT" that means to limit energy consumption of ICT, and secondly "ICT for green" that is to use ICT in order to limit the effects of other human activities. Following the goals of green technologies, "green for ICT" leads to technologies that are sustainably produced and long lasting, are used efficiently and are reusable. Although the above mainly hold for hardware, this work proposes a green approach to educational technologies, by transferring green ICT's characteristics into software and ICT applications. This is done by introducing digital learning objects. Digital learning objects are small learning tools that include instructional goals and can be used in different instructional contexts. Digital learning objects have certain characteristics. They are reusable, interoperable, durable, adaptable, manageable, and generative. These characteristics are the same as those of green ICT and aim at sustainable development in the field of learning technologies. Digital learning objects liberate digital education from the, usually of close type, large educational software packages devoted to a specific discipline, course, educational level, pedagogical approach, target group. Educators have been strongly interested in learning objects mainly due to the number of key elements that can counterbalance the low-degree incorporation of ICT in the educational process. Digital learning objects are tagged with metadata and they are mainly organized in digital repositories which can be accessed through the web. This work presents the reasoning of the design and development of digital learning objects concerning Physics education. They have been created in the context of the "digital school" project of the Hellenic Ministry of Culture, Education and Religious Affairs. They cover both primary and secondary educational levels. They can be accessed freely in the Photodentro repository (<http://photodentro.edu.gr/>) and are covered by the Creative Commons Attribution-Non Commercial-Share Alike Greece 3.0 license. An example of a learning object is "the human eye, myopia and presbyopia". It consists of an innovative simulation on the focus function of the human eye when suffering from myopia or presbyopia. The user has the option to manually increase/decrease the intensity of these two anomalies and to add corrective lenses so that he/she can study how the use of lenses corrects the focus function. This can be used either in primary or secondary education, for presentation or inquiry purposes, for didactic or learning activities. Thus, it includes sustainability, source reduction, innovation, viability and "cradle to cradle" design, the characteristics of green technologies.



Short CV

Dr. Anastasios (Tassos) Mikropoulos holds a B.Sc. in Physics from the University of Ioannina, Greece (1983). He has worked on optical signal processing in the National Hellenic Research Foundation, the University of Manchester, University of Szeged, Hungary, and holds a Ph.D. from the University of Athens, Greece (1990). He is a Professor at the Department of Primary Education, the University of Ioannina, Greece, as well as the founder and director of the "Educational Approaches to Virtual Reality Technologies laboratory (EARTH lab)". Tassos Mikropoulos is among the founders and elected chair of the Hellenic Association of ICT in Education. His main research interests are on educational virtual environments, presence, and educational neuroscience. His research work has been published in Computers & Education, Educational Technology & Society, PsychNology Journal, Virtual Reality, Cyberpsychology, Behavior and Social Networking, International Journal of Science Education, Applied Physics B, and other referred journals. He is a member of the editorial board, guest editor and reviewer for many international journals. Professor Mikropoulos has been project director, principle investigator and consultant in numerous research & development and educational projects. He also serves as a consultant for the Greek Ministry of Education in topics such as digital school, ICT in education curricula, educational software, in-service teachers further training.

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Internet of Things - Environmental Monitoring & Awareness

Assistant Professor Eugenia I. Toki

Department of Speech and Language Therapy, Technological Educational Institute (TEI) of Epirus, Ioannina, Greece.

Environmental monitoring refers to repetitive and systematic studies that reveal the state of the environment. It describes the processes and activities that need to take place to characterize and monitor the quality of the environment. Also, monitoring can involve human activities that carry a risk of harmful effects on the natural environment. Air, soil and water quality, biodiversity and noise are amongst the areas of the environment that can be selected (depending on the environmental objectives and current legislation).

Internet of Things (IoT), is a network of Internet-enabled real world objects, not necessarily computers, that can be connected anytime, anyplace, with anything and anyone in the virtual world. IoT can create the potential of true openness and operation in smart spaces via intelligent interfaces within social, environmental, and user contexts.

The application of IoT can help citizens to collect, share and understand their environment. Smart platforms can accommodate various types of information, environmental content, eonews, discussions, games or even collecting environmental information. IoT is an innovative method of monitoring and assessing environmental information that can stimulate changes in the citizens' behavior due to an extended awareness of their environmental situation. Such applications will be discussed together with further encouraging role, potentials on environmental monitoring and awareness along with the context of lifelong learning and open learning educational approaches.



Short CV

Dr. Eugenia (Evi) Toki, holds a B.Sc. Honours degree in Computer Science from Kingston University, Kingston Upon Thames, UK (1992). She also holds a M.Sc. degree Computer Science in Language, Speech and Auditory Processing from the University of Sheffield, Sheffield, UK (1997) and a Ph.D. from the University of Ioannina, Ioannina, Greece. She is a member of the academic staff at the Department of Speech and Language Therapy of the Technological Educational Institute (TEI) of Epirus, Greece (www.teiep.gr) since 2003. Her main research interests are in the field of computer science with emphasis on New Technologies in speech & language therapy and learning, E-learning, Digital Game Based learning, Digital Storytelling, ICTs in Education/Special Education, Computer-Mediated Communication, Knowledge Communities, Language Development, Open Distance Learning. She has published over 25 papers in refereed scientific journals and conference proceedings, as a main researcher. She is a reviewer in 3 journals.

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Living in a green city: Green technologies and other environmentally friendly infrastructure of urban areas

Professor Andrei L. Podolsky

Yuri Gagarin State Technical University of Saratov, Russia

I present two case-studies of environmentally-friendly cities: Raleigh, USA, and Hannover, Germany. I review an original classification of urban environmental friendliness (EF), comprising of nine components of the city infrastructure.

The 1st EF component is related to preserving patches of natural landscapes within the city limits, including natural terrain, water bodies and streams surrounded by wetlands and flood-plain forest corridors. All of those account for excellent drainage and provide for the variety of vegetation and wildlife occurring and breeding in the city.

The 2nd component translates into clean urban environment as a result of spatial partitioning of industrial and residential areas. Major polluting industrial enterprises are moved outside city limits, which benefits air, soil, and water quality as well as urban biodiversity.

The 3rd EF component is defined by the state-of-the-art green technologies used at the city wastewater treatment plants and strict control of vehicle exhaust during annual inspections, as well as by advanced filtering systems at factories emitting pollutants.

The 4th constituent of the city EF is represented by advanced and comprehensive solid waste collection and recycling systems. Saving strategies for residential electricity and water use are maintained by differential billing (the increased rate charge for utilities used above established monthly consumption limits).

The 5th infrastructural component of urban EF relates to promoting residents to use environmentally friendly energy sources via income tax deductibles for those home

and business owners who are using alternative energy sources, or buying hybrid-engine vehicles.

The 6th component is represented by exceptionally high proportion of natural forested habitats and gardens in the case-study cities, along with developed network of greenway trails running through the corridors of undisturbed natural habitats. Urban lakes and streams, flowing through the city while being surrounded by natural landscapes excluded from residential development, create unique opportunities for in-city recreation.

The 7th EF component is environmentally-adequate urban architecture and planning. Constructing low-rise buildings does not require cranes and other bulky machinery, which makes possible to build houses without total destruction of natural landscapes. Architectural and landscape design styles are harmonious due to the fact that they must comply with regulatory codes of particular residential neighborhoods.

The 8th component is adequately organized street traffic. Multi-lane beltlines connected by several radial city highways lacking stoplights or intersections ensure high speed and safety of the city traffic. One-way city streets exclude the possibility of head-on crashes while highway medians inhibit illegal U-turns thus reducing car accidents and road congestion. Traffic flow at city streets is also improved by car-pool lanes and adequately organized parking system that includes multi-level parking decks, bans for smaller street parking, efficient towing service, and park-and-ride facilities preventing city residents from driving on downtown streets.

The 9th component of urban EF is a comprehensive system of environmental education, which is the topic of the Lecture 2.

Environmental education on the basis of museums: The project approach

Professor Andrei L. Podolsky

Yuri Gagarin State Technical University of Saratov, Russia

The lecture reviews the 9th component of urban environmental friendliness (EF), using case-studies of Raleigh (North Carolina, USA) and Hannover (Lower Saxony, Germany). It is represented by highly effective system of project-based informal environmental education provided to all age categories of city residents by the state-of-the-art system of various museums, botanical gardens, zoos, and numerous urban nature reserves.

In accordance with the Federal Law of the United States, the state-owned museums have free admission, which provides unlimited access for financially deprived residents. Each year, museums conduct numerous environmental awareness events for public, such as Amphibian and Reptilian Days, Bug Fest, Chemistry Festival, Migrating Bird Festival, and Astronomy Days.

Relatively small museum staff is aided by the army of volunteers: over 3000 at North Carolina Museum of Natural Sciences (NCMNS) alone, represented by school and college students, having mandatory public service assignments at their educational establishments, along with adult and retired city residents.

Structurally, NCMNS is a unique museum with eight levels of scientific exhibits (in two buildings), and multiple student research laboratories, Discovery Room for young children, free-of-charge 3-D nature movie theater, and teaching facilities, where extracurricular courses are taught seven days a week to hundreds of city school students and their teachers. Wild nature scientific expeditions for gifted students are organized annually, both within the United States and internationally.

The 38-acre Prairie Ridge Ecostation, owned by NCMNS and located in the central parts of Raleigh, provides additional research facilities to the school students.

It is worth noting highly effective environmental self-education of city residents via unlimited opportunities to study wild nature right within the city limits. Raleigh has numerous birdwatchers and butterfly-watchers, and most residential houses have multiple bird and animal feeders on their grounds, attracting those all year round. Nature watching does an important contribution to the national economy: according to the U.S. Fish & Wildlife Service 2009 annual report on fishing, hunting, and wildlife-associated recreation, economic effect from bird watching alone (sales of field guides and binoculars, along with paying for overnight stay and for food while traveling for bird-watching purposes) amounts nationally to 36 billion dollars!

While zoos, aquariums, and botanical gardens are comparable in quality on both sides of the Atlantic, accessibility of those is much higher in the U.S. due to several times lower admission prices, which are possible due to numerous volunteers helping their staff. In Europe, volunteers are scarce or absent in zoos, aquariums and botanical gardens, because their presence is confronted by trade unions (banned in most of the U.S. states). The latter consider volunteers as competitors for paid job positions.

The project approach to formal environmental education at universities, as one of the most effective educational technologies, is reviewed using the case-study of the project-based university curriculum at Yuri Gagarin State Technical University of Saratov (Russia).



Short CV

Andrei L. Podolsky had graduated from Saratov State University (SSU), Russia, with an Honors Diploma and Bachelor's Degree in Biology and Education, and worked until 1988 as a lecturer and researcher at SSU. In 1988-1996, he was an Associate Director at Saratov State Center for Environmental Education.

After short-term research internships at Central European University (Budapest, Hungary, 1996) and Montana State University (Bozeman, MT, USA, 1996), he pursued his Master's Degree in Environmental Studies and Economics of

Environmental Management at one of the world renowned Ivy League schools – Yale University (New Haven, Connecticut, USA, 1996-1998).

After receiving his Doctorate Degree in Zoology and Ecology from North Carolina State University (Raleigh, NC, USA, 1998-2003), he was employed by NC colleges and universities, teaching various courses in the field of ecology and conducting research on modeling population dynamics of endangered bird species for the US National Park Service. Later on he worked for the State of North Carolina Department of Education as a Program Coordinator for Gifted School Students.

From 2011 on, he is employed by Yuri Gagarin State Technical University of Saratov (Russia) as a Professor at the Department of Ecology and as Adjunct Professor at the Department of Foreign Languages and International Communication. His research interests cover various interdisciplinary topics, including monitoring of environmental pollution, modeling ecosystem processes, using IT in ecological studies and environmental education, expert systems and project approach in environmental education, environmentally-friendly urban planning and green technologies, etc. He is an author of

about 170 scientific publications (abstracts in various proceedings of conferences and congresses, full papers in peer-reviewed journals, monographs, university textbooks). In 2011-2014, he received 5 awards from European Academy of Natural Sciences (Hannover, Germany) and Russian Academy of Natural Sciences (Moscow).

Green Technologies, Green Computing – Green Communication

Associate Professor Evangelos K. Evangelou
Department of Physics, University of Ioannina, Greece

The evolution of more sophisticated and faster electronic devices and systems is inevitably bound to more complex and heavy power demanding machines. The power consumed to operate these devices is finally dissipated as heat in the Environment thus assisting in the Global Environmental Heating problem. At the same time, huge climatic changes have been observed and monitored the last decades. The so called "Global warming" problem is so severe that all International Organizations are taking measures against it.

The Computing and (Tele) Communication organizations have strongly supported the idea of "GREEN" technologies to be implemented in all related systems and devices. The definition of "GREEN" technologies and the first attempts to introduce the corresponding standards will be the main subject of the present lecture.



Short CV

Evangelos K. Evangelou is Associate Professor in the Laboratory of Electronics Telecomms and Applications, Dept. of Physics, University of Ioannina, Ioannina, Greece. His research is related to the physics and technology of micro- and nano-Electronic devices based on Si and Ge substrates for future MOS devices and applications. Recently, he is also involved in various European projects in the field of GREEN Computing and Communications.

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Distance education or Distance in Education

Professor Costas Tsolakidis
University of Aegean, Greece

It covers a theoretical study on technology and examines its relationship with education and the parameters that govern it. It attempts a definition and a description of distance education including its methods and techniques. It presents a theory on distance education - the transactional distance theory - and analyzes its basic principles. It studies technologies for distance learning, training scenarios and evaluation methods with examples and best practices deriving from teaching and research programs carried out by the instructor.



Short CV

Dr Costas Tsolakidis is elected professor at the department of education at the University of the Aegean.

He studied electronic engineering at the University of Dundee in Scotland (BSc Honrs, MSc, PhD)

For ten years he worked in the private sector self employed and participating as shareholder in companies working on software development, management and education.

In the University he taught information technology related subjects. He has an international profile in the ICT community in Europe. His research interests include Introduction of Information Technology in Education, Distance Education, Information Technology as tools for the development of remote and rural areas, Use of IT in Multigame Schools, Virtual Reality as a teaching tool.

E-learning and Green Technologies

Professor Jenny Pange

Laboratory of New Technologies and Distance Learning, School of Education,
University of Ioannina, Greece

E-learning is offering new educational approaches through different educational tools like online courses, MOOCs and webinars, all available over the Internet.

Recently, universities, organizations and enterprises offer educational and training programs or courses concerning Green Technologies.

Universities in Europe and elsewhere (Australia, USA) offer nowadays online a lot of Master Programs concerning computers and Green Technologies. They, also, have developed series of ongoing MOOCs covering only green technologies and offering training programs through Webinars. Furthermore, many webinars today are organized about the latest developments in sustainable technologies, services and programs, comparing also traditional learning courses with the use of ICT like PCs, printers, toners/inks, cables and other supplies.

According to the results of recent studies ICT and e-learning contribute to the environmental protection as they decrease transportations, energy consumption, use of paper, ink and other materials or supplies.

This presentation is a review on useful e-learning tools (online courses, MOOCs and Webinars) used by students for Green Technologies.

Keywords: E-learning, Green Technologies, MOOCs, Webinars



Short CV

Jenny Pange is Professor of Information Technology and Applied Mathematics, in the School of Education, in the University of Ioannina, Greece. She served as member of the Senate of the University of Ioannina, Dean of the School of Education and Vice-Head of the Department of Early Childhood Education. Dr. J. Pange is member of the Board of Advisors of UNIADRION. She is member in many National and International Associations and Networks on Distance Learning and Life -long Learning. She is project director in EEC research projects and also Departmental

ERASMUS coordinator. Dr Pange has organized many Conferences and Special Sessions in National and International Conferences. She is Director of the Laboratory 'New Technologies and Distance Learning' at the School of Education, in the University of Ioannina, Greece. Her research work includes books and research papers in journals and conferences.

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Compulsory Renewable Energy Education in Greece

Professor Gerasimos Kekkeris

Primary Education Department, Democritus University of Thrace, Alexandroupolis,
Greece

School education manages to motivate people while they are still young students to reach an environmental conscience and establish renewable energy awareness. In Greece, from 1974 to 2006, Greek curricula of compulsory education, despite the ongoing reforms, have sought to change individual behavior in renewable energy use through imposing stable structured educational models. Renewable energy education had been incorporated into curricula in schools but the goals of this education were related to the direct acquisition of knowledge and skills with emphasis on knowledge goal achievements. In 2006 the Pedagogical Institute which develops educational policy in Greece introduced a reformed interdisciplinary curriculum for compulsory education that suggests holistic approaches to some kind of renewable energy topics. Renewable energy education of primary school gives a lot of emphasis on the systematic understanding of pupils on energy saving and renewable energy attitudes, creating awareness about sustainable development. Secondary school curriculum objective is mainly to drive students, by project-based learning, to analyze renewable energy and environmental situations and search for suitable sustainable solutions. Fully interactive scenarios, where students can interact via Scratch environment with renewable energy issues, are suggested as a science project. Their scope is to deep students' understanding in the world of renewable energy sources and to help students in experimenting and interacting with events in the physical world.



Short CV

Gerasimos Kekkeris is professor in the Department of Primary Education at Democritus University of Thrace. His research interests include ICT in Education, application of multimedia in aesthetic education, safe Internet, distance education, Renewable Energy Education.

Forest Kindergarten, Transformative Designs for Pedagogics and Evaluation using Planning & Social Networking electronic means.

Associate Professor Maria Sakellariou

Department of Early Childhood Education, University of Ioannina, Greece

The Forest Kindergarten is an Innovative Alternative Model of Preschool Education, which is implemented in the framework of the Preschool Pedagogy courses for the first time in Greece in the spring of 2012 and was based on the pedagogical reform movement of "Pedagogy of the Forest" (<http://earlychildhoodpedagogy.gr>).

Within the Students Internships Program and the express of interest from teachers of the city of Ioannina, this innovative program now applies to even more Kindergartens every year.

Kindergarten Forest can be described as a kindergarten "without a roof, walls and doors ...". Educators and children spend time outdoors, usually in a forest. A special feature of the Forest Kindergarten is the emphasis to the game, with toys made of objects that can be found in nature, instead of commercial games... However, despite these differences, the Forest Kindergartens are designed to accomplish the same basic purpose like other Kindergartens, namely, to care for the all-round development and learning for young children.

From the academic year 2012-2013 we also apply the Innovative Approach "Learning by Design" (<http://neamathisi.com/learning-by-design>) for the first time in Greece, to the design, the evaluation and implementation of students'/future kindergarten teachers' of Pre-School University of Ioannina internships, under the Preschool Pedagogy courses program.

'Learning by Design' uses a diverse and cohesive Pedagogical Approach based on the active participation of teachers and students for the design of dynamic learning environments with the use of electronic means of design and social networking (<http://cglearner.com/>), while being an innovative school-based training model that can be used at regional and national level.



Short CV

Maria Sakellariou is an Associate Professor, President of the Department of Preschool Education, University of Ioannina and Director of the Master's Program. She has studied at the Aristotle University of Thessaloniki, where she completed her Master and Doctoral thesis with emphasis to Education. Her studies include International Pedagogy and Preschool Pedagogy seminars at the University of Zurich, Switzerland. She taught as Visitor Professor at the Department of Education at the Cyprus University and at the Master's Program "Gender and New Technologies in Education" implemented by Department of

Preschool Education, Aegean University.

Her research interests and the author's work focuses on issues of Pedagogy and Preschool / First-Elementary Education, especially on the cognitive areas of Teaching Methodology and Program Design, Social and Ethical Learning, as well as of the School - Family - Community Cooperation. She is the author and co-publisher of 13 books, while she has co-authored numerous research papers and articles for international journals and collective volumes (<http://earlychildhoodpedagogy.gr> <http://ecedu.uoi.gr>). In recent years she successfully organizes the annual International Preschool Symposium, in which Greek and foreign universities take part as well as distinguished scientists from abroad. Current research trends are thereby examined for transformative education, effective teaching and program design.

Finally she is responsible for the Students' Internships and applies innovative educational activities, such as the Forest Kindergarten and 'Learning by Design' program in collaboration with research networks and social organizations from the Greek and the international academic community.

Basic Principles of Developing Scenario Using the Animation "language" and the Classical Hollywood Mode of Narration

Lecturer Spyros Siakas

Technological Educational Institute (TEI) of Athens, Greece

In this paper, the basic principles of developing scenario using the animation "language" and the Classical Hollywood mode of narration are presented.

Animation Technique and Classical Hollywood mode of narration are chosen as basic research tool for the following reasons:

Animation presents strong expressional potential and currently has many applications and the animation expressive tools like storyboard and animatic could constitute dynamic instructive tools in the field of education.

The Classical Hollywood narrative is a characteristic example of using the audiovisual language in such way that the story content is presented in a more effective way.



Short CV

Spyros Th. Siakas is lecturer and teaches animation in the graphic design faculty of the Technological Educational Institute of Athens

After his studies in the pedagogical, fine arts and Graphic design fields, pursued postgraduate studies in Open and Distance Learning (PhD) at the Open Distance University of Greece and in animation (MA) at The Surrey

Institute of Arts and Design, University College in U.K., having acquired a full scholarship from Greek government (I.K.Y). In the context of his PhD research he has designed various animation workshops and educational animation projects.

Media Language in times of crisis

Assistant Professor Nikoletta Tsitsanoudis–Mallidis

Department of Early Childhood Education, University of Ioannina, Greece

The paper explores and analyses the language structures use and the language functions in the representation of the financial crisis plaguing Greece especially after the so – called "Memorandum of Understanding" implementation. The analysis concerns traditional and contemporary journalistic issues and articles and is based on Critical Discourse Analysis principles.

As noted in specific documents, Greek economic crisis and its bad effects are reflected through noun and verbal structures. Structures rotation is due to different communicative intentions of journalistic texts designers and producers. Sometimes we notice that people are seriously involved into the painful crisis experience as a "victim" and other times the speech function is just descriptive. Generally, crisis language representation refers to a personalized substance that concerns and threatens almost all of Greek society and not a single part of it.

Finally, it is very interesting to notice "low social varieties" language use where the crisis effects description is required, with obvious "pop speech" characteristics. On the other hand for the supposed appropriate crisis solutions a more systematic and cultured language is used, claiming the social recognition.

Additionally, the paper examines the linguistic representations of the economic crisis in the diverse advertising messages for commercial products and companies that were broadcasted, both in TV and radio, as well as the Internet. Specifically, we examine the ways in which different situationist environments, associated with the economic backwardness of Greece and the imposition of harsh austerity measures, affect the

design and production of advertisements. Moreover, we analyze the strategies, under which various advertising texts presented, organized and rebuilt the socioeconomic reality, in order to ensure the acceptability of their receivers. Indicatively, representations of toddlers and children are presented, as discovered in the current "crisis advertisements".

As shown, consumer products emerge as the panacea to serious financial problems of citizens / consumers, through a prearranged "spontaneous" discourse. This discourse, when not completely ignoring reality, it cauterizes it and breaks it down, or, going one step further, ultimately reconstructs it, in favor of each advertised product. This paper is completed with the conclusion that between the social context and the advertising texts there is a constant interaction which arises from the unpleasant experiences of the citizens, due to the economic downturn. It extends to the arbitrary transformation of human experience in ideal receptors of consumer products, which are supposed to heal the pain and deprivation caused by the economic crisis.



Short CV

Nikoletta Tsitsanoudis – Mallidis (Ph.D.) is Assistant Professor of Linguistics and Greek Language at the Pre – School Education Department of the University of Ioannina in Greece. She has taught language, mass media and journalistic discourse in several Greek universities. More than 70 issues and papers of her have been published in refereed journals and conference proceedings in Greece, Europe and United States. She is the author of 12 scientific and literary books. Recent scientific books of her are used as textbooks in University departments of Ioannina, Athens and Thessaly. She is associate editor of international linguistic journal in USA and reviewer in several international journals.

She has been till now academic coordinator of three major programs of Greek Language teaching in the International Cultural Center "Stavros Niarchos" in Ioannina. She is awarded by the International Union of Writers and Artists, municipalities, humanitarian and cultural associations. Besides, she is the recipient of the 2013 "Untested Ideas Outstanding Research Scholar Award" and "Untested Ideas Outstanding Journal Reviewer Award".

She excelled after evaluation as "2014 Ioannina Fellow" in the Harvard-Olympia Program - Comparative Cultures Seminar, Center for Hellenic Studies of Harvard University. President of Global Academic Affairs of Euro – American Women's Council (EAWC).

She has worked for many years as a journalist for major newspapers in Greece and managed regional television and radio media. She is an active member of Association of European Journalists (AEJ). She is married with Mr. George Mallidis and have two children.

The DCSYM Systemic Methodology acts as a Green Technology Approach in a Public Hospital and in a Private Bank

Professor Nikitas Assimakopoulos,
Department of Informatics, University of Piraeus, Greece.

In this paper we shall examine the similarities of the Systems Approach to a Green Technology Approach and we shall present in detail the development of the DCSYM Systemic Methodology. We shall deliver the application of DCSYM in a Health Unit of a Public Hospital in Athens in a strategic hierarchical level and the application of DCSYM in the development of a procedure for a loan in a private Bank in Greece.

Further to these applications, we shall give a short but real application of the DCSYM Green Technology Approach in a private well known Chemical Company making also use of the DCSYM Case Tool software.

Keywords: DCSYM Systemic Methodology, Green Technology Approach, DCSYM Case Tool



Short CV

Dr. Nikitas Assimakopoulos is a Professor of the Department of Informatics at the University of Piraeus, Greece. His research interests include Systemic Methodologies, Systems Approaches to Management and Informatics, Dynamic Simulation Systems, Information Systems, Workflow Systems, Virtual Enterprises and Applied Operations Research Techniques. He has been lecturing at Chelsea College, University of London, England, and at the Athens University of Economics and Business, Greece. Dr. Assimakopoulos was a consultant of the British Post Office and of the Agricultural Bank of Greece, and also holds the professional title FOR of the British Operational Research Society.

He has published over 100 papers in refereed journals, 150 papers in conference proceedings and has participated in about 130 conferences with papers. Also, he is Associate Editor in five international journals and reviewer in 12 well-known journals which are associated with the four International Societies where he serves as active member. Dr. Assimakopoulos is the inventor of the Design and Control Systemic Methodology (DCSYM) Int. J. of Applied Systemic Studies, 2009 Vol.2, No.3, pp.193 – 217, and of the STIMEVIS multi-systemic methodology, Human Systems Management, vol 19 (2000), 61-69.

Dr. Nikitas Assimakopoulos is a member of the Board of Advisors which is the governing body of the Global Association for Systems Thinking (GAST). They provide the senior leadership, expertise, and wise-counsel to enhance the success of the Association. Advisory Board Members are leaders the Systems Thinking field.

Dr. Assimakopoulos has organized International and National Conferences (last one: www.2015.hsss.eu) and is the founder and elected President of the Hellenic Society for Systemic Studies (HSSS) (www.hsss.eu). He is the founder and the coordinator of the first internationally Post-Graduate Professional Program of Certified Systemic Analyst Professional (CSAP) with ISO/IEC 17024 (www.csap.gr) which is supported by the HSSS and offers governmental administration credits for the public clerks. The CSAP Program operates through the University of Piraeus - Research Center in Greece and a number of experts from the international community of systems approach present their professional work in it via a live e-learning software. Due to the professional character of the Program, 60 Consulting and Informatics very well-known Companies present their software, their successful projects and they try pick up CSAP members for their professional work. Dr. Assimakopoulos has been invited frequently to give talks at national and international conferences and research organizations. Dr. Assimakopoulos is the founder and the Editor-in-Chief of the Journal of Applied Systemic Studies (IJASS) published by Inderscience Publishers (<http://www.inderscience.com/jhome.php?jcode=ijass>).

Best Practices for Green Data Centers

Assistant Professor Apostolos Gkamas

University Ecclesiastical Academy of Vella of Ioannina, Greece

Traditional computer Data Centers are contained facilities which house the many large computer systems and associated components in isolated, temperature controlled rooms. Typically, a Data Center houses: Telecommunications systems, Storage

systems, Heating – ventilation - air-conditioning systems, Security systems, Redundant and backup systems.

It has been estimated that ICT (Information and Communication Technologies) contributes a similar amount of CO₂ emissions to that from the entire aviation industry – 2% in 2007 with a projection of rising to 3% by 2020. Data Centers are the big "ICT user" of electricity: Data Centers forecasted to surpass airlines in terms of CO₂ emissions by 2020 due to energy consumed and Data Center power demands have doubled in last five years.

A Green Data Center has mechanical, lighting, electrical and computer systems designed for maximum energy efficiency and minimum environmental impact. More specifically a Green Data Center looks for benefits in Reduction in power and cooling, Increase server/storage utilization and Improvement in Data Center space.

The construction and operation of a Green Data Center includes advanced technologies and strategies, for example: Minimizing the footprints of the buildings, Use of low-emission building materials, Sustainable landscaping, Waste recycling, Use of alternative energy technologies such as photovoltaics, heat pumps, and evaporative cooling, etc.

In order to improve the energy efficiency of Green Data Centers, it is necessary to consider all stages from design through to construction. Even after the building of Green Data Centers is complete, they must continue to be managed and maintained to ensure efficient energy consumption. In order to build and operate an Green Data Center best practices must be followed for Planning, Utilization and management, ICT equipment and services, Cooling, Data Center power equipment, Other Data Center equipment, Data Center building, Monitoring, Design of network, Cloud data center, and Optimization of energy management of the whole Data Center.



Short CV

Apostolos Gkamas obtained his Diploma, Master Degree and Ph.D from the Computer Engineering and Informatics Department of Patras University (Greece). He is currently Assistant Professor (with tenure) in University Ecclesiastical Academy of Vella, Ioannina. His research interests include Computer Networks, Telematics, Multimedia transmission and Cross Layer Design. More particular he is engaged in transmission of multimedia data over networks and multicast congestion control. He has published more than 80 papers in international Journals and well-known refereed conferences.

He is also co-author of three books (one with subject Multimedia and Computer Networks one with subject Special Network Issues and one with subject IPv6). He has participated in various R&D project (in both EU and national) such as IST, FP6, FP7, Intereg eLearning, PENED, EPEAEK, and Information Society.

B. Workshops

Workshop 1: ICT applications for Green Technologies

Christina Toki,
Konstantinos Plachouras,
Maria Tsironi

Green Internet of Things (IoT): Applications for small cities

Internet of things applications for green technologies will be investigated in the workshop. Activities regarding the protection and monitoring of the environment will be set as examples for agriculture & breeding, recycling, environmental management services etc. Then students will identify and describe the green technology systems which could support green internet of things in a remote area such as Konitsa. Also, they will discuss on how IoT in green technologies (i.e. energy efficiencies and renewable energies, sustainable construction) would influence the environmental awareness of local community.

Christina Toki



Short CV

Dr. Christina TOKI, holds a BEng (Hons) degree in Engineering with environmental studies from Sheffield Hallam University U.K., (12/06/1997) and a BEng (Hons) degree in Mechanical engineering from ATEI Patra Greece, (6/11/2003). She also holds a MSc in Environmental engineering from the University of Portsmouth U.K., (13/11/1998) and a PhD "Evaluation of Temperature Phased Aerobic Digestion Process Using Chicken Manure as a Surrogate for Wastewater Sludge" from the University of Portsmouth , U.K. (12/2005). She has been a researcher (i) in Environmental technology group at the University of Portsmouth U.K., (1/9/1999-31/8/2002) (ii) in advanced water treatment using nanofiltration at the Biwater Ltd., UK in collaboration with University of Portsmouth U.K., (05/1998 – 11/1998) and (iii) in water quality and monitoring at the Department of Technology of the environment and ecology, Zakynthos, Greece 27/9/2011– 5/7/2012. She has been a Senior lecturer at Department of Technology of the environment and ecology, Zakynthos, Greece 9/2004 –7/2012, teaching Environmental engineering, Waste management, Wastewater treatment, Environmental technology etc. Currently she is an Environmental adult educator at the Second chance school of Ioannina, Greece, (2/2013- today) and a Senior lecturer teaching Environmental education at the Department of Preschool Education of TEI of Epirus, Ioannina, Greece (10/2012 –2/2015). She has published nine Scientific papers of which six as the main author, all in peer reviewed journals. She is a reviewer for academic journals (i) Journal of Applied Mechanics and (ii) Heat and Mass Transfer and she is member of (i) Chartered Institution of Water and Environmental Management (CIWEM) (UK (26/4/02-today) and (II) Chartered Engineering Council UK (24/5/02-Today).

Constantine Plachouras



Short CV

Constantine Plachouras born in 1970 in Ioannina, Greece graduated from the Aristotle University of Thessaloniki, Greece, School of Electrical and Computer Engineering in 1992. He has been self-employed as Electrical and Computer Engineer since 1995. Since 2001 he is working at the Network and Information Centre of Technological Educational Institute (TEI) of Epirus and he is responsible for data and voice networks at Ioannina and Igoumenitsa branches of TEI of Epirus, webmaster of several websites and system administrator of many IT systems of TEI including LDAP server (Lightweight Directory Access Protocol), mail server and Students Information Management System.

Maria Tsironi



Short CV

Maria E. Tsironi is a PhD student in the University of Ioannina in the School of Education, Department of Early Childhood Education. She graduated from the Department of Materials Science and Engineering, University of Ioannina (2013), and completed her Master specification of Interdepartmental Program of Masters Studies of Department of Materials Science and Engineering, and Department of Chemistry (University of Ioannina, 2015).

Workshop 2: ICT tools for Environmental Use

Evangelos Evangelou,
Eftychia Kalogianni,
Athanasios Sypsas

The human activity affects the global ecological systems in a negative manner such that it endangers the environmental balance for the future generations. The Computing and (Tele) Communication organizations have strongly supported the idea of "GREEN" technologies to be implemented in all related systems and devices. These technologies that can be adopted in order to improve the energy consumption, reduce the CO₂ emissions, reuse resources, etc. will be presented in this workshop.

Eftychia Kalogianni



Short CV

Born in Ioannina, Greece in 1989. After successful completion of Diploma in rural and surveying engineering at National Technical University of Athens [Greece, 2012], she completed the Master of Science Degree in Geoinformation at NTUA [2015] and at the moment she graduates from Delft University of Technology [The Netherlands] receiving the Master of Science Degree in Geomatics. During January 2013 and August 2013 she was an employee at the company "Geomatics SA" in Athens working as an engineer at the following projects:

- *Trans Adriatic Pipeline [TAP], update of cadaster in Greece for the TAP pipeline and digitization of property borders, quality control.*

- *The Ras Eidyer – Emissad expressway project – Al Marj section –*

Since May 2015 she is an employee at the company "NAMA Consulting Engineers and Planners S.A." working as an engineer in projects at the sectors of Water and Environment, Transport and Engineering and Surveying and GIS. Skills she has developed up to now: Microsoft office [word, excel, power point, access], Internet, AutoCad Map and AutoCad Civil, Autodesk Maya [3D environment], ArcGIS, Quantum GIS, PgAdmin – PostgreSQL, Rhinoceros [basics, also basic skills in parametric design using Grasshopper], Adobe Photoshop and Adobe Illustrator [basics]. She has attended many workshops and conferences and has 4 publications at International Conferences in the fields of Geographic Information, 3D Geoinformation and Location Based Systems. She speaks fluently Greek, English and French [obtains C2 and C1 Proficiency Degrees respectively]. She is member of the Technical Chamber of Greece, FIG Young Surveyors and HellasGI. She has participated as a volunteer at the organization of the 3rd FIG Young Surveyors European Meeting in Sofia, Bulgaria [May 2015], contributing specifically in the task group "Preparation of the program". She enjoys climbing and tennis, contemporary and modern dance, classic ballet and travelling. motorway project in Libya.

Athanasios Sypsas



Short CV

Athanasios Sypsas studied computer Science and Telecommunications at the National & Kapodistrian University of Athens, Greece (2001). He received his MSc in Intergraded Systems of Hardware and Software from University of Patras, Greece (2004) and he is PhD student at Department of Early Childhood Education, School of Education, University of Ioannina (Greece). His main scientific interests are e-Learning, m-Learning, distance learning, Webinars, social networks and Green Technologies usage in education. He is author of several articles regarding his researching fields and published in peer-reviewed proceedings and volumes. He has been working in Telecommunication Industry (INTRACOM S.A.) and as a

scientific collaborator at TEI of Epirus.

Workshop 3: Using Distance Education ICT tools for Environmental Studies

Costas Tsolakidis,
Aspa Lekka,
Maria Tsironi

Information and Communication Technologies (ICT) offer appropriate tools to empower environmental education and also raise environmental awareness. Tools like Computer Games are presented in this workshop in order to raise students' environmental alertness. Additionally, online courses on environmental issues are presented.

Aspa Lekka



Short CV

Aspa Lekka was born in Ioannina. She studied mathematics at University of Ioannina, Greece and she is currently a PhD student at the University of Ioannina. She enrolled in the Academy of Entrepreneurship in order to help young entrepreneurs find about funding and working possibilities within the EU.

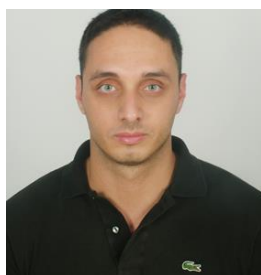
Her main scientific interests are social networks, entrepreneurship, e-Learning, distance learning and Green Technologies usage in education. She is author of several articles regarding her researching fields and published in peer-reviewed proceedings and volumes.

Workshop 4: Technology, Environment, Pedagogy

Gerasimos Kekkeris,
Ioannis Balouktsis,
Konstantina Karameri

Renewable energy education helps pupils of primary school to understand energy saving and renewable energy attitudes, creating awareness about sustainable development. In the present workshop, fully interactive scenarios via Scratch environment with renewable energy issues are presented. These scenarios will help participants to create their own scenarios and use them in their future studies.

Ioannis Balouktsis



Short CV

Ioannis Balouktsis is a PhD student in the Department of Primary Education at Democritus University of Thrace. His research interests include ICT in Education, Physical Computing in education, Renewable Energy & Power Electronics.

Konstantina Karameri



Short CV

Konstantina Karameri is a PhD candidate student at the University of Ioannina at the Department of Early Childhood Education. Her Thesis research focuses on Copyright Learning Methods in Education with the use of New Technologies. She has completed her studies in Law at the Aristotle University of Thessaloniki and Master studies, 'MA Art Law and Economy' at the International Hellenic University. The last two years she has been cooperating with KEA European Affairs, Brussels as a freelance consultant for Culture and Copyright. She has participated in research studies for the European Parliament and the European Commission. She speaks English professionally and has a very good command of German and French.

Workshop 5: Creating educational activities using interactive video for environmental issues

Nikoletta Tsitsanoudis-Mallidis,
Rozita Tsoni,
Maria Tsironi

The use of interactive video is a highly engaging teaching practice. In the Web, educators can find many available teaching recourses and tools in order to enrich their course. Educannon is a free online application that provides the opportunity to create interactive videos for educational use. These tools can be used even by inexperienced internet users in order to create interactive learning content for environmental education.

Rozita Tsoni



Short CV

Rodanthi Tsoni holds a diploma in physics. She is a PhD candidate at University of Ioannina, in the Department of Early Childhood Education. She attended seminars concerning educational psychology, digital storytelling and comics in education, MOODLE and evaluation of online courses from "Quality Matters". She speaks English, French and Spanish. She has a good level of computer use. She has attended several conferences and participated with publications and workshops. Since 2002 she works as a physics teacher. Her field of interest is Educational Technology, Instructional Design, Online Learning and Distance Education.

Workshop 6: Green Technology Approaches in Tourism

Nikitas Asimakopoulos,
Rozita Tsoni,
Liu Xia

Green Technologies represent a new developmental paradigm in tourism and hospitality industry. Also, provide the possibility to use them for tourism development and entrepreneurship. Local communities and countries as a whole may benefit from tourism green development. Using Green Technologies in tourism can be considered as "value for money" in business operations offering environmental protection to local community.

Xia Liu



Short CV

Xia Liu is a PhD student in Department of Early Childhood Education, School of Education, University of Ioannina, Greece. She holds Master degree from the Department of Early Childhood Education, School of Education, Northeast Normal University, China and Bachelor from the Department of Educational Theory, School of Education, Heilongjiang University, China. Her research interests include Preschool Education, Educational Policy, Information and Communication Technology (ICT) in Education.

INSTRUCTIONS FOR DATA COLLECTION FOR THE WORKSHOPS

All participants will visit different places for data collection for the summer school. Each place they will visit, offers the opportunity to gather information concerning the computers-ICT evolution for green technologies.

All participants can use a digital camera, or any digital equipment, or just their mobile phone to take photographs, video and record the natural beauty and sounds. Feel free to use your imagination..!!!

For the course material please record:

- Natural surroundings indicative of the flora and fauna of the region
- Natural resources
- Up-to –date, energy use
- Renewable recourses
- Human interventions in natural surrounding
- Technological applications to solve environmental problems
- or whatever you believe is worth mentioning concerning ICT and environmental issues

Cooperation in between two or three participants is allowed.

At the end of the Summer School you have to deliver to your tutor:

- A PowerPoint presentation that would include the data (from all different recourses) and
- Proposals for the best use of ICT for energy saving, for future infrastructures etc.

Finally, the work of all participants, will be presented for evaluation on the 7th of September 2015.

General Information about Konitsa

Travelling to Konitsa

1. **By Airplane** The area of Konitsa is served by the Airport King Pyrrros, located in Ioannina.

Schedules: <http://en.aegeanair.com/>. Outside the airport there is a bus stop of local busses and taxi. Busses from central station stop outside of the airport. (It takes almost 10' min for a bus to travel from the central bus station to airport bus stop).

2. **By BUS** <http://www.ktelioannina.gr/>, Telephones: +30 2651025014, 27442, 26286

Route	Days and Hours
IOANNINA-KONITSA	EVERYDAY: 05:00, 10:30, 13:00, 16:00, 19:45 SATURDAY: 07:30, 14:00, 19:45 SUNDAY: 07:30, 14:00, 19:45
KONITSA-IOANNINA	EVERYDAY: 07:00, 09:30, 13:30, 17:30, 21:00 SATURDAY: 09:30, 16:00, 21:00 SUNDAY: 09:30, 16:00, 21:00

3. **By TAXI** Ioannina: <http://www.taxi-ioannina.gr/>, Tel +30 2651046777

Konitsa: Tel +30 2655022500 or 2655022471, (minimum tariff, 3.5 euro)

4. **By Auto** From Ioannina at about 63 km you reach the town of Konitsa.

(Information <http://www.konitsa.gr/visit/access>)

Route map: <http://vriskoapostasi.gr/διαδρομή/Ιωάννινα/Κόνιτσα>

Hospitals : Ioannina: 1. Hatzikosta, +302651966111

2. University Hospital, +3026510 99111

3. Health Center Konitsa: +30 2655023111

Drug stores, Pharmacies in KONITSA: +3026550 22666, 22779, 22255

Outdoor activities: <http://www.nolimits.com.gr/>, Tel: +306944751418

Rafting: Cost: 20 euro per person, Duration: 3 hours, or 4 hours total (including transportation), swimming suit needed

Swimming pools: Swimming is free of charge in most Hotels in Konitsa, but a minimum consumption of drinks (3 euro approximately) is required.

- **Gefyri Hotel** (<http://www.gefyri.gr/>)
- **Lotos farm** (<http://konitsalotosfarm.gr/>)

Police office: tel. +302655022202

Time zone: EEST, UTC/GMT +3 hours

Telephone: outgoing calls to

- Russia: +7.....
- Greece: +30.....

DAILY TOUR TO PARGA



The trip is not compulsory!!!

11:00- Departure from Lyceum of Konitsa

13:30 – Arrival to Parga,

– Visit to the castle and the village of Parga,
Collection of data,
Discussion on environmental issues and free time for sightseeing

19:30- Departure for Konitsa

22:00- Arrival to Konitsa

- Please make sure to bring your swimming suit
- Cost per person: 60€ (light Lunch included)