



Co-funded by the
Erasmus+ Programme
of the European Union

International Summer School on Land degradation in Kyrgyz Republic

Kyrgyz State Technical University named after I. Razzakov
Osh Technological University

www.iucland.eu

From July 10-15, 2017

IUCLAND - International University Cooperation on Land Protection
in European-Asiatic Countries
3 Years (1/10/2015 to 1/10/2018) www.iucland.eu

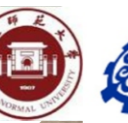
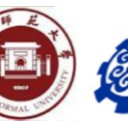
Course Descriptions

The “International Summer School on Land degradation in Kyrgyz Republic” will be held from **July 10 to 15 2017** at Kyrgyz State Technical University and Osh Technological University, prospect Ch. Aitmatov 66, Bishkek (Kyrgyz Republic).

The Summer School will last one week, providing a wide range of intensive courses on soil degradation, land degradation and best practices in Organic Agriculture and livestock productions, in the Technogenic environment and Ecological problems in mountain areas.

The standard course will be developed over **48 hours**, including lectures and technical activities (on field/laboratory), for a total of **4 ECTS credits**.

IUCLAND - International University Cooperation on Land Protection in European-Asiatic Countries is an educational project funded by the Erasmus+ Programme under the Key Action 2 on “Cooperation for innovation and the exchange of good practices.” The project implementation period is 3 Years from (1/10/2015 to 1/10/2018). For more information please visit www.iucland.eu.



Background

The Summer School involves 12 Partners:

- P1) Università degli studi del Molise (coordinator) Italy
- P2) Slovak university of Agriculture in Nitra Programme Country - Slovakia
- P3) University of Zagreb Faculty of Agriculture Programme Country - Croatia
- P4) FORMIT, Programme Country - Italy
- P5) Huazhong Agricultural University Partner Country - China
- P6) Institute of Soil Science, Chinese Academy of Sciences Partner Country - China
- P7) Fujian Normal University Partner Country - China
- P8) Kyrgyz State Technical University named after I. Razzakov Partner Country - Kyrgyzstan
- P9) Osh Technological University Partner country - Kyrgyzstan
- P10) East-Kazakhstan State Technical University Partner country - Kazakhstan
- P11) Studiogiuliano srl, Programme Country - Italy
- P12) M. Auezov South Kazakhstan State University Partner country - Kazakhstan



Aim

IUCLAND aims to improve the effectiveness of development and land protection strategies by increasing both cooperation capacity, sharing best practices and increasing productivity through educational patterns by involving High Education Institutions (HEIs) and potential stakeholders, e.g. farmers' association, development agencies, agricultural organizations, nongovernmental organizations (NGOs) and decision-makers.

The main objective is to create an international network in Land Degradation topics among universities and other organizations of the society at large aimed at: establishing a structured cooperation for scientific research and knowledge transfer; offering summer schools and workshops that will train the actual and future generation of academics and students, able to do research and produce innovation in the framework of land degradation; and exchanging experiences and good practices related to educational programs among involved Programme and Partner countries.

Lectures given by Faculty Staff from the five universities involved in IUCLAND project and international experts will provide updated overviews on research at the frontier of soil science, forest ecology, sustainable agriculture and livestock productions, land protection and environmental legislation.

Organization

The International Summer School (10-15 July 2017) consists of 4 days of classroom lectures at the Kyrgyz State Technical University named after I. Razzakov and 2 day on field activities, for an overall duration of 48 hours. The classroom of the summer school will consist of lectures and discussions. The full immersion course will start on July 10th. The program is articulated in 4 lectures days (4 ECTS credits) and the last two days are devoted to on field and laboratory activities. At the end of the course, a certification of the acquired credits will be released.

Learning Model

- 1) The learning model includes lectures, case studies, group projects, simulations, experiential learning. The evaluation system is based on written tests, and classroom work
- 2) Self-study includes 6 hours. From the beginning of the summers school, a one hours will be made available to each participant in order to examine in depth the topics discussed during the seminars.
- 3) Final work and final examination is for 4 hours and it will be conducted at the end of the summer school.
- 4) Attendance to all activities is mandatory. To achieve satisfactory attendance a student must attend both scheduled lectures and planned training activities.



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Program & Faculty

Lectures

Land Degradation: All Problems of Soil Degradation in Kyrgyzstan (Bekbolotova Aigul)
Forest resources of Kyrgyzstan, their current state and problems of degradation. (Shamshiyev B.)
Ecology of soils in the southern Kyrgyzstan and improvement of their condition. (On the example of the Kok-Art River basin) (Sakbaeva Z.)
"Influence of natural and technogenic processes on the state of land resources and land degradation problems". (Shamshiyev B.)
The process of solonchization and its influence on the ecology of irrigated soils in Kyrgyzstan (Kenzhakhimov K.)
Landscaping assessment of land degradation in the territory of Kyrgyzstan. (Toktoraliev E.)
Rational use of land resources and increase of profitability of agricultural activities in Kyrgyzstan. Lecturer Ph.D. Attokurov A.
Influence of application of pesticides on soil fertility in southern Kyrgyzstan. Lecturer Ph.D. Teshebaeva Z.
GIS-Monitoring of Land Degradation in Kyrgyzstan. Kochkonbaeva B.
Land degradation and its relation to the state of biodiversity Shamshiev B.
"Waste Management in Kyrgyzstan in Addressing Land Degradation Problems". Attokurov A.
Entomopathogenic biological agents in plant protection. Teshebaeva Z.
Legislative base of Kyrgyzstan in the field of land resources and biodiversity. Lecturer Kadyrbekdieva B.
"Problems of mountain pastures degradation in Kyrgyzstan and ways to increase their productivity". Lecturer Ph.D. Attokurov A.

Practical lessons

The use of satellite imagery. The most accessible sources of Earth remote sensing data (Karimova Gulmira)
Visual interpretation and decryption of the image. Classification of satellite imagery. Calculation of classification accuracy, absolute and relative classification error (Karimova Gulmira)
Ecological state of soils in the field: according to the thickness of the humus horizon, the mechanical composition and the relief exposures (Kenzhahimov Kadyrbek)
Study of the principles of laying soil sections and methods for selecting soil samples in the field (Kenzhakhimov Kadyrbek)

Training activities

In the last days (2 days) the group will go to field work to study the thickness of the humus layer, the mechanical composition of the soil, taking into account the exposure of the terrain. They will familiarize themselves with the principles of laying soil sections, methods of selecting soil samples in the field to obtain practical skills, and to consolidate basic knowledge in the field of land use.

Scholarships

The International Summer School offers 30 **number scholarships** for participation in the 2017 activities for IUCLAND participants (3 for each partners) and 10 local participant, in total about 40 students.

A maximum of 10 external auditors (students or stakeholders) will be admitted to a course on a space-available basis and with the approval of the Summer School coordinator. The auditor that attends at class do not acquire credits. Auditors can attend classes regularly, and participate in discussions, but they are excluded from examinations.

Participation in the summer school is open to Kyrgyz candidates from Kyrgyz State Technical University and Osh Technological University in a limit of 10 students with an Academic Master Degree or PhD program (a minimum a Second Level Degree or equivalent titles) and to foreign

Selection of Kyrgyz student candidates

For Kyrgyz candidates, priority for admission will be established based on the evaluation of educational qualification (the score of academic records) and/or interview; foreign candidates will be evaluated according to the criteria set by academic institutions partners.

The scholarships available for Italian students will be awarded according to a rank order determined by taking into account the candidate's performance in the above mentioned evaluation process; for foreign students, awarding criteria will be set by the IUCLAND academic institutions partner.
Language: The programme is held in English and in Russian with English translation.

Summer School Coordinators

Tashtanbay Sartov (Kyrgyz State Technical University named after I. Razzakov)
Bakytbek Shamshiev (Osh Technological University)

Board of Directors

Dzhamanbaev Murataly (Kyrgyz State Technical University named after I. Razzakov)
Abidov Abdykadyr (Osh Technological University)
Maralbaev Akylbek (Kyrgyz State Technical University named after I. Razzakov)

Accommodation

Lodging expenses and field trip of successful applicants will be covered by the IUCLAND project for the selected student by all Partners (max 30 students), according to the IUCLAND program, including 3 fellow attendees and one faculty member of each Partner. Reservations for the participants during the week of the course having place in Bishkek have been made in bed and breakfasts and guesthouses.

Application

The application will be sent by e-mail addressed to Samanchin Bektash — International Office - Kyrgyz State Technical University named after I. Razzakov, Bishkek (Kyrgyz Republic) e-mail: bek_sam@mail.ru and in copy to the Summer School Coordinators Prof. Tashtanbay Sartov e-mail: ste-61@mail.ru ; Prof. Bakytbek Shamshiev e-mail: shamshiev@list.ru
In order to apply, it is necessary to submit a CV describing the academic and research career.

Examination:

The final exam consists of a 4-hour testing of knowledge at the end of the summer school. The topics to be covered in the exam are: land degradation problems, causes leading to soil disturbance, land restoration methods. Kyrgyz students will be evaluated by the board of directors and coordinators of the summer school. For the foreign students, evaluating criteria will be the same and the student will be evaluated by web meeting colloquium in presence of a tutor of the local IUCLAND academic partner staff.

Deadlines

The deadline for applications is 5 June 2017. The selection process will be completed by 15 June 2017. Application forms must be submitted either on-line by e-mail to Samanchin Bektash (bek_sam@mail.ru). Admitted candidates must confirm their participation no later than June 15th, 2017.

Confirming steps:

- i. Registration (see details)
- ii. Notification of acceptance of the Summer School Programme- including costs, deadlines, and all other conditions- to be addressed to Samanchin Bektash — International Office - Kyrgyz State Technical University named after I. Razzakov

Summer School Information

Coordinator of the project: Claudio Colombo (University of Molise) e-mail: colombo@unimol.it
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