



# INTENSIVE COURSES FOR MASTER LEVEL STUDENTS AUTUMN 2015 AND SPRING 2016

in the fields of Agriculture, Forestry and Veterinary Medicine

**Nordplus courses:** These courses are partly funded by the Nordic Council of Ministers and accommodation and meals are provided for students. The students can be reimbursed for travel costs. More information about the Nordplus network can be found here: http://www.nmbu.no/en/students/nova/nordplus

- Sustainable land management in Baltic countries, Approach of LC, 19.-23.October 2015, Lithuania
- Sustainable agriculture for rural development, 9.-13.November 2015, Lithuania
- Trees and shrubs under short rotation management, ecological and financial benefits and constraints, 21.-25.March 2016, Latvia

BOVA courses: (See more: <u>www.bova-university.org</u>)

- Landscape Cognition, 12.-16.October 2015, Latvia
- Food Texture and Microstructure, 26.-30.October 2015, Latvia
- Application of modern technologies in determination of geodetic height system, 26.-30.October 2015, Lituania.
- Entrepreneurship and Innovation for Rural Development, 14.-18. March 2016, Estonia to be confirmed
- Comparative animal welfare and practical assessment, 04-.09.April 2015, Estonia to be confirmed
- Waste to Resource in Baltic States 2020, 03.-09. May 2015, Estonia to be confirmed

NOVA Course: (see more: www.nova-university.org)

# • Sustainable Pig Production, week 8 and 16, Sweden and Estonia

More NOVA Master's courses may be approved for 2015/2016. Information will be available on the NOVA webpage when courses are approved <u>www.nova-university.org</u>

# **COURSE DETAILS:**

# SUSTAINABLE LAND MANAGEMENT IN BALTIC COUNTRIES, APPROACH OF LC

Time: 19.10-23.10.2015

Place: Kaunas, Lithuania

# Main organizer: Aleksandras Stulginskis University (ASU)

Number of participants: 20

Target group: Master students studying land management and spatial planning

Applications: Consult your local BOVA or NOVA coordinator. The registration form should be

filled in online: https://docs.google.com/forms/d/158sKM2K5toxz-

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# APPLICATION DEADLINE: 1 October 2015

What is covered: accommodation and meals are provided for students and students are

reimbursed for travel costs (contact your local Nordplus coordinator

http://www.nmbu.no/en/students/nova/nordplus/local-nordplus-coordinators)

# ECTS: 4

**Course description:** The main aim of the course – to introduce students to land use planning systems in the three Baltic States and outcomes and peculiarities of land reforms in different countries. The main intention for this course is to share the experience of Baltic countries in land management and spatial planning practice, legal regulation, need for such projects and possible economic benefits. Part of the course will be by distance learning – students will be provided with literature and the newest scientific articles on land consolidation. Each of them will have to write a report about land use planning experience and legal framework in his/her country.

Accepted students will meet for 5 days for theoretical lessons, practical seminars and field trips in Lithuania. A field trip is planned to the institutions responsible for land management project preparation.

After the course, the students will gain a broader understanding of the improvement of spatial structure of land parcels and rural development measures and implementation of spatial planning tools.

**The course will cover the following topics:** land use management in Baltic countries, spatial planning tools and practice, land reform and land parcels.

Students' performance will be evaluated on the successful completion of individual tasks during the distance part; group presentation on a land management project during the class meeting in Lithuania; individual written test on theoretical aspects of land use planning.

Teaching team includes lecturers from Estonia, Finland, Latvia, Lithuania and Sweden.

# More information at:

http://bova-university.org/for-msc-students/for-master-students/intensive-master-courses

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# SUSTAINABLE AGRICULTURE FOR RURAL DEVELOPMENT

Time: 09.11.-13.11.2015 Place: Kaunas, Lithuania Main organizer: Aleksandras Stulginskis University (ASU) Number of participants: 20 Target group: Master students studying agricultural and rural economics or development. Applications: You can find registration form here: https://docs.google.com/forms/d/158sKM2K5toxz-InGRNOE\_em6ae17N9dottpyhWwdb7E/viewform, http://bova-university.org/ REGISTRATION DEADLINE: 9 October 2015

What is covered: accommodation and part of the meals, for the travel costs you can apply Nordplus scholarship (<u>http://www.nova-university.org/page.cfm?open=5&MenySidor\_id=43</u>) ECTS: 4

**Course description:** The aim of the course – to deepen and expand students' highly specialized knowledge in the field of sustainable agriculture and to develop students' competencies required for solution of complex problems of rural development through agricultural multi-functionality. New functions of agriculture have come into sight, like ecological function, cultural function, information and education function, health and recreation function. Multi-functionality of agriculture and other rural economic activities determine the character of countryside infrastructure. Increasing requirements for food quality, safety and security in local markets, the EU and world markets, make the needs of environmental protection and conserving of natural resources increasingly actual.

After the course, students will be able to apply modern theories of economics and management for performing research in rural development; to diagnose scientific and applied problems of agriculture and rural development; to evaluate level of sustainability of agriculture and rural areas; to evaluate the process of rural development and the relevant policy changes; to make decisions related to the development of rural areas based on critical application of modern theories and recent scientific research results.

Teaching team includes lecturers from Estonia, Latvia and Lithuania.

#### More information at:

http://bova-university.org/for-msc-students/for-master-students/intensive-master-courses

# TREES AND SHRUBS UNDER SHORT ROTATION MANAGEMENT, ECOLOGICAL AND FINANCIAL **BENEFITS AND CONSTRAINTS**

#### Time: 21.03.25.03.2016

Place: Jelgava, Latvia

Main organizer: Latvia University of Agriculture (LUA)

#### Number of participants: 20

Target group: Students of forestry and related disciplines (biology, ecology, life sciences, earth sciences) as well as bioenergy production.

Applications: http://www.bova-university.org/ DEADLINE: 29 February 2016

What is covered: accommodation and part of the meals, for the travel costs you can apply Nordplus scholarship (http://www.nova-university.org/page.cfm?open=5&MenySidor id=43)

# ECTS: 4

Course description: Areas of short rotation planted stands on former arable lands have been increasing rapidly in Baltic States (especially Lithuania) the last 5 years, exceeding altogether ten thousand ha. Further increase and efficient management of these areas is often hampered by lack of knowledge and skills as well as uncertainty on the potential outcome. Therefore several (6 in Latvia alone) national and EU co-financed projects have been carried out within the last 2-3 years (some ongoing), establishing sets of demonstration trials with total area close to 100 ha as well as doing the measurements in the commercial plantations with the main goal to gather data on the efficient management of those plantations and develop innovative ideas. It is important to transfer the knowledge gained in these projects to end-users as quickly and efficiently as possible, therefore it is important to inform students, soon reaching the job market, on the newest findings. Typically, only financial benefits from short-rotation planted stands are accounted for. Latest data from trials in Baltic States will be used to demonstrate management alternatives, increasing this type of benefits (e.g. criteria to select best-suited material; ways to achieve assortment structure with highest market price etc.). Possibilities to increase financial benefits via multiple uses of the plantations (e.g. practical possibilities for agro-forestry, in the first years generating income from herbaceous plants and later on from wood; improvements of growth of fungal communities; recreational benefits) will be explained. Additionally our goal is to demonstrate, based on empirical evidence, also other forms of benefits for the owner and society, e.g. more efficient use of fertilizers combined with lower impact to water ecosystems, while establishing buffer zones around water body; increase in carbon-sequestration; complete-cycle use of renewable "green" energy (including utilisation of waste from heating stations - trials of ash-fertilization); benefits to diversity of bird communities and vegetation. The course will touch also the aspects of short-rotation forest stands: the ecological constraints (negative consequences to ecosystem while shortening the rotation) as well as potential (based on empirical data from 30-40 year old trials) financial and other benefits and provide assessment, where use of this approach could be advisable (especially in future with increasing frequency of different disturbances, especially storms) and where it shall be prohibited.

Aim of the course is to increase the students' theoretical and practical knowledge on the pros and cons of short rotation management on former arable as well as forest lands.

Learning outcomes: students are aware about the alternatives (options) for establishment and management of short-rotation stands, and are capable to develop sustainable solutions for own business initiatives or integration in larger projects.

Teaching team includes lecturers from Estonia, Finland, Lithuania and Sweden

else:

• Achieving educational/scientific targets: evaluation of group reports, presentations and discussions (done by the teachers)

• Process evaluation and "learning diary" (done by the participants)

# BOVA course not funded by Nordplus:

# APPLICATION OF MODERN TECHNOLOGIES IN DETERMINATION OF GEODETIC HEIGHT SYSTEM

Time: 26.10-30.10.2015

Place: Kaunas, Lithuania

Main organizer: Aleksandras Stulginskis University (ASU)

Number of participants: 20

**Target group:** Bachelor students studying water and land management **Applications:** Consult your local BOVA or NOVA coordinators. The registration form should be filled in online: https://docs.google.com/forms/d/158sKM2K5toxz-

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the use of precise height determination with GNSS.

# APPLICATION DEADLINE: 30 September 2015

What is covered: part of the meals, for accommodation and travel costs you can apply for Nordplus scholarship (<u>http://www.nova-university.org/page.cfm?open=5&MenySidor\_id=43</u>) ECTS: 4

# **Course description:** The main requirement for the creation of a national height system is the implementation of an accurate levelling network. The levelling network serves the realisation of the national height system. In all three Baltic countries, basic levelling networks have been developed since the end of the 20th century. The establishment and analysis of precise levelling networks of high quality requires great amassed geodetic experience. Observations from precise levelling are affected by e.g. the time of day, direct sunlight and weather conditions, therefore high quality levelling networks requires experienced surveyors together with rational organisation of the field work. After reobservation of the basic levelling networks in the Baltic countries, there have been discussions concerning the replacement of the existing height system. The results from precise levelling contributes to e.g. updating the geoid models, which again is directly related to

The main aim of this course is to present precise geometric levelling performance order and methodology for the best precision of observations, also trigonometric, GNSS levelling use and precisions; levelling field works; modelling the current height system replacement and specification of the geoid model.

**The course will cover the following topics:** determination of height systems, quality of geometric levelling performance and its methodology; geoid model and its updating.

Students' performance will be evaluated on the basis of preparation of individual task during the distance part; group presentation on application of height systems, done during the meeting in person course part.

Teaching team includes lecturers from Estonia, Latvia and Lithuania.

# More information at:

http://bova-university.org/for-msc-students/for-master-students/intensive-master-courses