LATVIA UNIVERSITY OF LIFE SCIENCES AND TECHNOLOGIES FACULTY OF ENVIRONMENT AND CIVIL ENGINEERING

APPROVED by the academic staff meeting of Department of Land Management and Geodesy February 6, 2018

LAND USE IN MUNICIPALITY

Jelgava

Programme

Code of the study course at LLU IS Register: JurZ1011

2CP (32 h): lectures – 16h, laboratory works – 16h

Type of assessment: Formal Test with a grade.

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Compulsory course of the professional Bachelor's degree level study programme "Land

Management and Surveying", 2nd semester in full-time and part-time studies.

Abstract

Students acquire understanding of the concept of land use. The study course provides an insight and knowledge on land use and protection conditions in the territory of a municipality, supervision of the municipality's land, land management owned by the municipality and having it in legal possession, as well as monitoring of degraded territories and prevention measures of degradation in the territory of the municipality.

The aim of the study course:

The study course gives an overview of sustainable land use, inventory and protection options in local governments.

Learning outcomes (knowledge, skills and competence):

After completing the study course students will have:

- **knowledge** on legal aspects of land use in a municipality, as well as land use and protection conditions;
- **skills** to use acquired knowledge practically in land management of the territory of the municipality;
- **competence** to access, select and analyse information and data independently, and use the acquired theoretical knowledge and practical skills in the monitoring process of the territory of the municipality.

Relation of the study course with other subjects:

- Students should have the prior knowledge in study courses "Cadastre", "Basics of Land Management".
- The study course provides an opportunity to acquire the courses connected with territorial planning and organisation more purposefully.

Requirements for individual work:

Individual studies of the theoretical material included in the bibliography.

Assessment of knowledge:

- The evaluation of the formal test is based on two successful written tests and passed laboratory works or a written test on the whole material covered during the semester.

Procedure and requirements for settling missed lectures:

- The missed or failed tests and missed laboratory works should be settled at the time scheduled by a lecturer.

Extended content of the programme

Introduction

The content of the study course "Land Use in municipality". Procedure and requirements of the study course. The list of literature.

The notion, aims, tasks of land use.

Land use concepts, their explanations and understanding in different historical periods. Land use goals, needs. Tasks of land use. Goals and tasks of land use in a local government.

Principles and conditions of land use and protection.

Effective management of natural resources and sustainable development. Categories of land use. Requirements for changes in land use categories. Obligations of land users. Land use conditions.

Land for provision of public infrastructure and accessibility in the territory of a local government.

Providing access to public areas and facilities. Providing access to inland public waters and specially protected nature territories. Providing access to newly created land parcels. Use of land for the maintenance of roads.

Municipality competence in land management.

Land management in the territory of the municipality. Municipal Reserve Land Fund. Territory development and land use planning

Use of vacant pieces of land in the territory of a municipality.

Obtaining information on the vacant pieces of land in a municipality's territory. An evaluation of the possibilities of using vacant pieces of land. Prospective use of vacant pieces of land.

Use of brownfields in a municipality's territory.

Obtaining information on degraded territories. Survey of a territory, detection and recording of brownfields. The assessment of brownfield usage possibilities. Prospective use of brownfields.

Laboratory works:

- 1. Land use indicators.
- 2. Selection of land-use data in the selected municipality.
- 3. Land-use data analysis using ArcGIS software.
- 4. Access solutions in a parish using the Bentley MicroStation software.
- 5. Preparation of the survey of the territory.
- 6. Vacant pieces of land, possibilities for their further use.
- 7. Identification pf degraded territories using ArcGIS software.

8. Prevention solutions of degradation.

Bibliography

Compulsory reading:

- 1. Demetris Demetriou. The development of integrated planning and decision support system (IPDSS) for land consolidation, printed by Printforce, the Netherlands, 2013, 340 pp
- 2. Zemes reforma atslēga uz īpašumu. (2013) Valsts zemes dienests, Rīga, 335 lpp. (pieejams: www.vzd.gov.lv)
- 3. Larsson G., Land Management, Public Policy, Control and Participation, Stockholm, 1997
- 4. UN Economic Commission for Europe Spatial Planning. Key instruments for development and effective governance, New York and Geneva, 2008.
- 5. Williamson I., Enemark S., Wallace J., Rajabifard A. Land administration for sustainable development. Esri press, Redlands, California, 2010, 487 pp.
- 6. Zemes izmantošana un kadastrs Latvijā. A.Boruka red. Rīga, 2001. 408 lpp

Further reading and sources of information:

- 1. Korna K, Zeme ir vērtīgākais valsts resurss. Diena, 2006. gada 12. oktobris
- 2. Zeme, mana, tava, mūsu.../ J.Stradiņš u.c. Rīga: VZD, 2002. 324 lpp.
- 3. Теория и методы ведения государственного мониторинга земель как информационной основы государственного кадастра недвижимости. Под научной редакцией Варламова А.А. Государственный университет по землеустройству, Москва, 2009, 321с.

Recommended periodicals:

- 1. žurnāls "Mērnieks"
- 2. www.vzd.gov.lv