

01S1-SSGR

GLOBAL FARMING SYSTEMS

ECTS: 4.0

HOURS PER SEMESTER/WEEK: LECTURES: 30/2; CLASSES: 30/2

COURSE CONTENTS

LECTURES: General characteristics of main farming systems. The most important differences between farming systems – yield, biological quality of crop and animal products, environmental consequences of production methods. Farming systems and bio-diversity. Characteristics of farming methods in the regions in the context of natural environment (soil and water quality, climate constraints), economic and cultural determinants (including reasons for malnutrition), crops grown and animals reared as well as agrarian structure. Characterisation of agriculture in macro-regions: examples of farming systems in North America (the USA), South America (Brazil, Argentina), Europe (France, the Netherlands), Asia (China, Indonesia), Africa (Egypt, Republic of South Africa) and Australia.

CLASSES: Farm-gate balances of macro-nutrients (N, P, K) in selected farming systems. Agricultural practices and soil humus balance. Developing fertilization and crop protection plans for selected crops and farming systems. Evaluation of economic efficiency for selected crops and animal products.

EDUCATIONAL PURPOSE: Characteristics of farming systems in the context of food production, food security and environmental protection on a global scale.

LEARNING OUTCOMES

Knowledge. The student has elementary knowledge of organic farming and other farming systems and their geographical distribution, and knows the key agricultural practices of crop and animal husbandry and the possibilities for their application in regions.

Skills. The student is able to distinguish and analyse farming system differences on a global scale. The student is able to find thematic materials (books and online databases) on agriculture and farming systems in different countries. The student is able to evaluate production potential of given farming system and its effect on environment and bio-diversity.

Social competences. The student understands the difference between agriculture and farming systems, and understands the need for continuous training. The student understands social and environmental consequences of farming systems on global scale. The student can evaluate the role of Polish agriculture in the world, and can work in a team.

TEACHING FORMS AND METHODS

Lectures. information lecture with multimedia presentation.

Classes. exercises: presentation method, case study.

FORM AND CONDITIONS FOR VERIFICATION OF LEARNING OUTCOMES

Lectures. Written test - credit with a grade.

Classes. Presentation with grade, written/oral test with grade.

BASIC LITERATURE

1) Internet databases: FAOSTAT, EUROSTAT, GUS

ADDITIONAL LITERATURE

THE TEACHER/S CONDUCTING THE CLASSES:

dr hab. Józef TYBURSKI, prof. UWM jozef.tyburski@uwm.edu.pl

FACULTY OF AGRICULTURE AND FORESTRY

Department of Agroecosystems and Horticulture

Address: Plac Łódzki 3, 10-718 Olsztyn-Kortowo, POLAND