



SZKOŁA GŁÓWNA
GOSPODARSTWA
WIEJSKIEGO

Medicinal and aromatic plants

Educational subject description sheet

Basic information

Field of study Course Offer for exchange students - second cycle studies, including uniform master studies (MA programmes)		Didactic cycle 2024/25
Speciality -		Subject code PWMPWM2S_D.B100000K.00784.24
Organizational unit Course Offer for exchange students		Lecture languages english
Study level second cycle studies, including uniform master studies (MA programmes)		Mandatory Obligatory subjects
Study form full-time studies		Block Major subjects
Education profile General academic		Disciplines Agriculture and horticulture
Coordinator	Katarzyna Bączek	
Teacher	Katarzyna Bączek	
Period Winter semester	Examination Exam	Number of ECTS points 2
	Activities and hours Lecture: 15 Laboratory exercises: 15	

Goals

Code	Goal
C1	to acquaint the students with diversity of medicinal and aromatic plants (MAPs) in respect of: the number of species, their origin and occurrence (habitat type), plant parts collected as herbal raw materials, requirements in cultivation, and application in various industries; to acquaint the students with biologically active compounds occurring in MAPs; to acquaint the students with factors influencing the quality of herbal raw materials; to acquaint the students with basic methods of identification and quality evaluation of herbal raw materials.

Entry requirements

The student has knowledge on plant systematics, biology and chemistry.

Subject's learning outcomes

Code	Outcomes in terms of	Effects	Examination methods
Knowledge - Student knows and understands:			
W1	the diversity of MAPs and herbal raw materials obtained from these plants and understand the factors influencing their development, cultivation and quality.		Written exam, Test (written or computer based)
W2	the groups of main biologically active compounds occurring in MAPs and understand the direction of their application.		Written exam
W3	basic methods of herbal raw materials evaluation and utilization and understand how to apply these methods.		Written exam
Skills - Student can:			
U1	identify the most important species of MAPs and raw materials obtained from these plants.		Test (written or computer based)
U2	carry out a preliminary evaluation of the quality of herbal raw materials.		Assessment of activity during classes
U3	produce seedlings of selected MAPs species, to start their cultivation and carry out basic treatments during the cultivation, to harvest herbal raw materials and properly prepare them for the use.		Assessment of activity during classes
Social competences - Student is ready to:			
K1	aware of the need to act in accordance with the principles of ethics in MAPs production.		Assessment of activity during classes

Study content

No.	Course content	Subject's learning outcomes	Activities
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1.	The occurrence, diversity and utilization of MAPs. The classification of herbal raw materials and products received from them. Biologically active constituents of herbal raw materials. Factors influencing the quality of herbal raw materials. Cultivation of medicinal and aromatic plants. Problems concerning introduction of wild growing medicinal plants into cultivation.	W1, W2, W3, U1, U2, U3, K1	Lecture, Laboratory exercises
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Course advanced

Activities	Methods of conducting classes
Lecture	Lecture, Discussion
Laboratory exercises	Presentation, Laboratory (experiment), learning by experiment, Field observations

Activities	Examination method	Percentage
Lecture	Written exam	50%
Laboratory exercises	Test (written or computer based)	30%
Laboratory exercises	Assessment of activity during classes	20%

Activities	Credit conditions
Lecture	positive mark of the exam
Laboratory exercises	positive mark of the test and activity during classes

Literature

Obligatory

1. Wichtl M. (Ed.) 2004. Herbal Drugs and Phytopharmaceuticals. CRC Press, Boca Raton, London, New York, Washington D.C.
2. Hamilton A.C. 2004. Medicinal plants, conservation and livelihoods. Biodiversity and Conservation 13: 1477-1517.
3. WHO guidelines on good agricultural and collection practices (GACP) for medicinal plants. WHO, Geneva 2003.

Optional

1. Mukherjee P.I. Quality control and evaluation of herbal drugs. Elsevier.
2. Opara E.I and Chohan M. Culinary herbs and spices. Royal Society of Chemistry

Calculation of ECTS points

Activity form	Activity hours*
Lecture	15
Laboratory exercises	15
Preparation for the exam	10
Preparation for the test	10

Student workload	Hours 50
Number of ECTS points	ECTS 2

* hour means 45 minutes