Herbs and spices
(IIIrd YEAR, Vth SEMESTRY)

No. of transferable credits 3

Course status
Discipline field (optional courses)

Prof. dr. ROBU Teodor

Discipline's objectives (course and aplications)

The course aims to make students acquire knowledge on the importance of aromatic plants, seasoning/ spicy and tinctorial plants, how to use them in food industry: meat industry, pastry - bakery, dairy and beverage. It also aims at acquiring knowledge about spontaneous and cultivated medicinal plants, content in active principles of species, techniques and methods of harvesting, drying, conditioning and primary processing.

Practical work aims to make students acquire knowledge on biological particularities of aromatic plants, seasoning/ spicy and tinctorial plants, (anatomy, morphology) systematic classification (family, genus, species), requirements for vegetation factors (temperature, humidity, food, soil, light), edible parts and potential use of each species in food industry: meat industry, pastry - bakery, dairy and beverage.

Discipline content (analitical program)

Course(Chapters/ subchapters)
Cap. I. History of using aromatic, seasoning/ spicy and tinctorial plants in our country and all over the world.
Cap.II. Classification of aromatic, seasoning/ spicy and tinctorial plants.
Cap. III. Active principles/ ingredients of aromatic, seasoning/ spicy and tinctorial plants.
Cap. IV. Spontaneous of aromatic, seasoning/ spicy and tinctorial plants.
Cap.V. Harvesting, drying and packaging of aromatic, seasoning/ spicy and tinctorial plants.
Cap.VI. Primary processing of aromatic, seasoning/ spicy and tinctorial plants.
Cap.VII. Use of aromatic, seasoning/ spicy and tinctorial plants.
Practical works/Seminaries/ Lab activity
Notiuni generale, introductive privind potentialul multiplu de utilizare al speciilor aromatice, codimentare și tinctoriale
Evidentierea potențialului toxic al unor specii aromatice, codimentare și tinctoriale. Elemente de protecția muncii în timpul recoltării, depozitării, prelucrării ambalării şi utilizării.
Părtile edibile ale speciilor aromatice, codimentare și tinctoriale, principii activi și concentrarea acestora în diferite organe, pretabilitatea pentru utilizare in industria alimentară.
Aromatic, seasoning/ spicy and tinctorial species of *Apiaceae* Family – for use in food industry.
Aromatic, seasoning/ spicy and tinctorial species of *Labiatae* Family – for use in food industry.
Aromatic, seasoning/ spicy and tinctorial species of *Asteraceae* Family – for use in food industry.

Aromatic, seasoning/ spicy and tinctorial species of other botanical families, as follows: *Cruciferae, Brasicaceae, Solanaceae, Papaveraceae, Rosaceae, Canabaceae*– for use in food industry.
Particular techniques for harvesting of aromatic, seasoning/ spicy and tinctorial species for a superior potential exploitation in food industry.
Development of some drugs and spices using as raw material of aromatic, seasoning/ spicy and tinctorial plants
Final colloquium - knowledge tests.

Bibliography

1. **Banu C**., şi colab.1999 – Manualul inginerului din industria alimentară. Ed. Tehnica, Bucureşti.
2. **Bojor O**., 2009 - Ghidul plantelor medicinale si aromatice de la A la Z, Ed. Fiat Lux ISBN 9789739250689.
3. **Brezeanu Creola** şi colab. - 2010 - Plante utile pentru agricultura ecologică – Ed. Alma Mater, ISBN 978-606-527-085-5.
4. **Milică C., Elena Bavaru, Robu T.,** 2004 - Izvoare de sănătate din flora medicinală. Editura Ovidius University Press, Constanţa, ISBN 973 – 614-193-4.
5. **Muntean l. S.** 2007 - Tratat de plante medicinale cultivate si spontane, Ed. Risoprint, Cluj Napoca, ISBN 978-973-751-463-9.
6. **Robu T., Milică C**. 2004 - Plante medicinale autohtone, Editura Institutul European, Iaşi.
7. **Zaharia M.** şi colab. 2011 – Fitotehnie, Lucrări de laborator, Editura "Ion Ionescu de la Brad", Iaşi.

Final evaluation

Types of evaluation	Types of evaluation	% from final grades
Exam	Written assessment	60%
Assessment activity during the semester	Oral evaluation during semester, knowledge tests. Final colloquium	40%

Contact person

Prof. dr. Teodor ROBU
Faculty of Agriculture - IULS Iași
Aleea Mihail Sadoveanu no. 3, Iaşi, 700490, România
phone: +40 0232 407347, fax: +40 0232 260650
E-mail: teorobu@uaiasi.ro