

Numer modułu zgodnie z planem studiów	ZF S1_38A
Kierunek lub kierunki studiów	Herb crops and phytoproducts
Nazwa modułu kształcenia, także nazwa w języku angielskim	<b>Home and exotic spices</b> <b>Przyprawy krajowe i egzotyczne</b>
Język wykładowy	English
Rodzaj modułu kształcenia obowiązkowy/fakultatywny	optional
Poziom studiów	nonstationary
Forma studiów	Bachelor's first degree
Rok studiów dla kierunku	III (year of study)
Semestr dla kierunku	6
Liczba punktów ECTS z podziałem na kontaktowe/niekontaktowe	5 (2,6/2,4)
Tytuł/stopień, imię i nazwisko osoby odpowiedzialnej za moduł	dr hab. Andrzej Sałata, prof. UP
Jednostka oferująca moduł	Department of Vegetable and Herb Crops
Cel modułu	Familiarize students with the requirements of the producers on the quality of raw materials and spices, as well as factors having a decisive impact on their quality. Familiarize students with the general principles of standardization of raw materials, and techniques used in assessing their quality. Acquainted with quantitative and qualitative parameters which determine the reproducible quality raw materials based on existing standards.
Treści programowe modułu kształcenia	<p>Lectures</p> <p>Spices and herbs, substances and type of substances: rosemary (carnosic acid, carnosol, rosmarinic acid, rosmanol), sage (carnosol, carnosic acid, rosmanol, rosmarinic acid), oregano (derivatives of phenolic acids, flavonoids, tocopherols), thyme (thymol, carvacrol, p-cunene-2-3-diol, biphehyls, flavonoids), ginger (gingerol-related compounds, diarylheptanoids), turmeric (curcumis), summer savory (rosmarinic acid, carnosol, carvacrol, thymol), black pepper (phenolic amides, flavonides), red pepper (capsaicin), chilli pepper (capsaicin, capsacinol), clove (eugenol, gallates), Marjoram. (Flavonoids), Common balm (Flavonoids), Licorice (Flavonoids, licorice phenolics).</p> <p>Exercises</p> <p>Conventional classification of herbs and spices: Hot spices (capsicum (chillies), cayenne pepper, black and white peppers, ginger, mustard), mild spices (paprika, coriander), aromatic spices (allspice (pimento), cardamom, cassia, cinnamon, clove, cumin, dill, fennel, fenugreek, mace and nutmeg), aromatic vegetables (onion, garlic, shallot, celery).</p>

Wykaz literatury podstawowej i uzupełniającej	<ol style="list-style-type: none"> <li>1. Edwards, Sarah E., Ines da Costa Rocha, Elizabeth M. Williamson, Michael Henrich. Phytopharmacy: An Evidence-Based Guide to Herbal Medicinal Products. 2015 by John Wiley and Sons, Ltd</li> <li>2. Penso G. Index Plantarum Medicinalium Totius Mundi Eorumque Synonymorum, OEMF, Milano.</li> <li>3. Watson L. Dallwitz M.J. The Families of Flowering Plants: Description, Illustrations, Identification and Information Retrieval. Version: 14th December 2000. <a href="http://biodiversity.uno.edu/delta/">http://biodiversity.uno.edu/delta/</a>.</li> <li>4. Vigneau Ch. Plantes Medicinales. Therapeutique - Toxicite. Paris, Masson.</li> <li>5. Tyler V., Robberts J. Tyler's Herbs of choice. The therapeutic use of Phytomedicinal. CRC Press</li> <li>6. Duke A.J. Handbook of Medicine Herbs. CRC Press, 2002</li> </ol>																																										
Planowane formy/działania/metody dydaktyczne	The theory will be given by means of lectures. A syllabus and slides are available as study material. For the practical exercises the students will perform experiments and analyses in the lab. Extra demonstrations will be given.																																										
Sposoby weryfikacji oraz formy dokumentowania osiągniętych efektów kształcenia	Permanent evaluation. Practical examination. Laboratory classes: periodic practical and written tests. Classes: periodic oral examinations and final written test. The exam is oral. Several questions will be given to the students. The students have time to prepare their answers. W1, W2 - written report of problems U1 - assessment of activity during practical exercises K1 - oral credit of the course																																										
Bilans punktów ECTS	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; width: 40%;">Forms of classes</th> <th colspan="2" style="text-align: center;">ECTS points</th> </tr> <tr> <th></th> <th style="text-align: center;">Number of hours contact</th> <th></th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td style="text-align: center;">30</td> <td style="text-align: center;">1,20</td> </tr> <tr> <td>Classes</td> <td style="text-align: center;">20</td> <td style="text-align: center;">0,80</td> </tr> <tr> <td>Field work</td> <td style="text-align: center;">10</td> <td style="text-align: center;">0,40</td> </tr> <tr> <td>Consultations</td> <td style="text-align: center;">3</td> <td style="text-align: center;">0,12</td> </tr> <tr> <td>Credit student with a course</td> <td style="text-align: center;">2</td> <td style="text-align: center;">0,08</td> </tr> <tr> <td><b>Total of hours contact</b></td> <td style="text-align: center;"><b>65</b></td> <td style="text-align: center;"><b>2,60</b></td> </tr> <tr> <td>Number of hours non-contact to prepare for the class</td> <td style="text-align: center;">10</td> <td style="text-align: center;">0,40</td> </tr> <tr> <td>To prepare for exercise</td> <td style="text-align: center;">20</td> <td style="text-align: center;">0,80</td> </tr> <tr> <td>To prepare for the credit</td> <td style="text-align: center;">20</td> <td style="text-align: center;">0,80</td> </tr> <tr> <td>studying recommended literature</td> <td style="text-align: center;">10</td> <td style="text-align: center;">0,40</td> </tr> <tr> <td><b>Total of hours non-contact</b></td> <td style="text-align: center;"><b>60h</b></td> <td style="text-align: center;"><b>2,40</b></td> </tr> <tr> <td><b>Total student workload</b></td> <td style="text-align: center;"><b>125</b></td> <td style="text-align: center;"><b>5,00</b></td> </tr> </tbody> </table>	Forms of classes	ECTS points			Number of hours contact		Lectures	30	1,20	Classes	20	0,80	Field work	10	0,40	Consultations	3	0,12	Credit student with a course	2	0,08	<b>Total of hours contact</b>	<b>65</b>	<b>2,60</b>	Number of hours non-contact to prepare for the class	10	0,40	To prepare for exercise	20	0,80	To prepare for the credit	20	0,80	studying recommended literature	10	0,40	<b>Total of hours non-contact</b>	<b>60h</b>	<b>2,40</b>	<b>Total student workload</b>	<b>125</b>	<b>5,00</b>
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Odniesienie efektów modułowych do efektów kierunkowych	W1 - ZF_W03 W2 - ZF_W05 U1 - ZF_U03 K1 - ZF_K01																																										