

Courses in English

Study Plan of English Module HORTICULTURE Winter Semester

Code	Course	ECTS	Course content
Z15-0105-I	Special Fruit Growing	6	Growing technology of selected fruit species - site selection, investments for various operations, soil preparation. Suitable rootstocks and cultivars for commercial orchards. Dates and planting techniques. Agricultural operations during vegetation. Training and pruning systems. Weed elimination. Fertilizing and irrigation. Pest and disease management. Fruit picking. Modern trends in biological material outplanting. Cluster 1: Extensive and intensive fruit plantings. Intensification of fruit production. Cluster 2: Particularity of growth, yielding and training and pruning of fruit trees. Cluster 3: The most important pests and diseases of fruit trees. Cluster 4: Intensive growing technology of pome fruits. Cluster 5: Intensive growing technology of stone fruits. Cluster 6: Intensive growing technology of berry and stone fruits.
622Z410	Integrated Systems of Fruit Production	6	The subject advises students of integrated fruit production systems implementation into the orchards of Slovak republic. Includes the issues of optimal fruit tree growing by thrifty inlets on environment with the emphasis on integrated pest management against the most important pest and diseases with the use of automatic meteorological stations and software programmes.
541Z501	Grape and Wine Evaluation	4	Content, nutritional substances in grapes, production and accumulation of content substances in the ripening process of grapes. The requirements for table grapes, uvological analysis, sensorial evaluation of table grapes. Assessment of grapevine, basic chemical analysis of must. Influence of fermentation, racking need, application of SO ₂ (sulphuring), clarification and stabilization of wine on its quality. Basic chemical analysis of wines, natural and extraneous components of wine. Standards related to the quality of grapes and wine. Sensorial evaluation of wine.

622Z511	Quality Management Systems in Horticulture	4	System of quality management as a tool for ensuring the high quality of products, benefits and adverse impacts of quality system performance in individual components of the chain "producer - processing plant - retailer - consumer. Characteristics of quality management systems HACCP, STN EN ISO 2200, ISO 9001, BRC Standard, IFS Standard, GlobalGAP, TFMS, SQF 1000 - implementation of the system, documentation, audits and control of keeping the system requirements, product quality assessment regarding the requirements of the individual systems.
Z15-0109-I	Pruning and Training of Fruit Trees	4	Terminology related to the field of wood pruning and training. Classification of tree forms. Goals of fruit woods pruning. Basic principles regulating growth and yielding of fruit woods. Physiologically based pruning. Basic and miscellaneous pruning methods, classification of pruning according to tree age (forming, regulating and rejuvenation pruning), material and tools used for fruit woods pruning and training. Contribution of pruning and forming to fruit production intensity. Pruning and training of individual fruit species - apple tree, pear, quince, medlar, sweet and sour cherries, apricot, peach tree, plum tree, currants, gooseberry, raspberries, blackberries, miscellaneous and shell fruit species - typical tree (bush) forms and their characteristics, practical procedure of training of the selected tree (bush) forms and regulating pruning.
Z15-0125-I	Post-harvest Technology of Horticultural Crops	6	Basic concepts, the quality of horticultural crops, effects on quality, quality requirements, management of quality, losses and reserves in production systems, post harvest operations and machine lines, types of stores, the process of storage, market adjustments.
Z15-0007-I	Diploma Thesis Seminar	2	The sequence of steps related to the elaboration of the diploma thesis - basic structure, special requirements. Text preparation. Preparation of documentation. Quote and list of bibliographic links. Formal aspect of work preparation and adaptation. Forms of presentation in the defense of the diploma thesis.
	Total	32	