3OHK1I37 – Mathematics

3OHK1I38 – Applied mathematics

3OHK1I39 – Computer science

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Course: | | **Computer Technology in Design** | | | | | | | | |
| Course id: ЗОПА4I37 | |
| Number of ECTS: 5 | |
| Teacher: | | Prof. dr Milan Tomic | | | | | | | | |
| Course status | | Elective | | | | | | | | |
| Number of active teaching classes (weekly) | | | | | | | | | | |
| Lectures: 2 | | Practical classes: 2 | | | Other teaching types: student`s papers (seminar) | | Study research work: - | | Other classes: - | |
| Precondition courses | | None | | | | | | | | |
| 1. Educational goal   The aim of the course is that students learn to use a computer for graphic presentation of ideas and concepts for the purposes of making and using technical documentation and projects in the field of landscape architecture. | | | | | | | | | | |
| 1. Educational outcomes   Students will acquire the necessary knowledge and skills to draw on the computer design and technological documentation and design of landscape spaces. In addition will have the necessary knowledge to create and handle various technical papers and video presentations. | | | | | | | | | | |
| 1. Course content   Theory:  - Image processing software (PhotoShop, CorelPhotoPeint ...) - Drawing software (AutoCAD, Corel Draw) - Visual preparation of marketing material (Power Point) - Data processing and publishing texts (Word, Excel, ...)  Practical classes:  Creating drawings of parts that are processed in a lecture. Independent of seminar paper application software that processing the lectures. View and defense seminar studies. | | | | | | | | | | |
| 1. Teaching methods   Lectures, Practical classes, Consultations, field trip, research work (optional) | | | | | | | | | | |
| Knowledge evaluation (maximum 100 points) | | | | | | | | | | |
| Pre-examination obligations | | | Mandatory | Points | | Final exam | | Mandatory | | Points |
| Lecture attendance | | | Yes | 5 | | Written part of the exam-tasks and theory | | Yes | | 45 |
| Exercise attendance | | | Yes | 10 | |  | | | | |
| Test, Term paper | | | Yes | 40 | |
| Literature | | | | | | | | | | |
| Ord. | Author | | Title | | | Publisher | | | | Year |
|  | Gligorić R., Milojević Z. | | Техничко цртаnje – inženjerske komunikacije  ( Technical drawing - engineering communications) | | | Poljoprivredni fakultet, Novi Sad  (Faculty of agriculture, Novi Sad) | | | | 2004. |
|  | Letić D. | | Inženjerska grafika za Auto CAD  (Engineering Graphics for Auto CAD) | | | Kompjuter biblioteka, Edicija Stvarni svet, Čačak  (Computerized library, Edition Stvarni Svet, Cacak) | | | | 2005. |
|  | Letić D. | | CAD mašinskih elemenata i konstrukcija,  (CAD mechanical elements and structures) | | | Kompjuter biblioteka, Edicija Stvarni svet, Čačak  (Computerized library, Edition Stvarni Svet, Cacak) | | | | 2005. |
|  | Gligorić R., Tomić M., Anđelković S. | | Uvod u kompjutersku grafiku, autorizovana skripta  (Introduction to computer graphics, Handout) | | | Poljoprivredni fakultet, Novi Sad  (Faculty of agriculture, Novi Sad) | | | | 2007 |

|  |  |  |
| --- | --- | --- |
| Znak univerziteta | UNIVERSITY OF NOVI SAD  FACULTY OF AGRICULTURE 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 8 | Znak fakulteta2 |
| Study Programme Accreditation  UNDERGRADUATE ACADEMIC STUDIES  Landscape architecture |
| Table 5.2 Course specification | | |
|  | | |

3OHK5I41 – Ekonomika preduzeća

3OHK5I42 – English I

|  |  |  |
| --- | --- | --- |
| Znak univerziteta | UNIVERSITY OF NOVI SAD  FACULTY OF AGRICULTURE 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 8 | Znak fakulteta2 |
| Study Programme Accreditation  UNDERGRADUATE ACADEMIC STUDIES  HORTICULTURE |
| Table 5.2 Course specification | | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Course: | | *Medicinal, aromatic and spice plants* | | | | | | | | | | | |
| Course id: 3ОХК5И43 | |
| Number of ECTS: 4 | |
| Teacher: | | Ph.D. Jovan Crnobarac; contributors: Ph.D. Dragana Latković, Ph.D. Goran Jaćimović | | | | | | | | | | | |
| Course status | | Elective | | | | | | | | | | | |
| Number of active teaching classes (weekly) | | | | | | | | | | | | | |
| Lectures: 2 | | Practical classes: 2 | | | | Other teaching types: | | | Study research work: | | Other classes: | | |
| Precondition courses | | None | | | | | | | | | | | |
| 1. Educational goal   The aim is to introduce students with the most important species of our wild and cultivated medicinal plants that are increasingly required in the domestic and foreign markets, as the necessary raw materials for the pharmaceutical and food industries. The richness of our medical flora, both in number of species, but also according to their chemical diversity is very high. However, the collection of medicinal plants from spontaneous flora, so far has been performed insufficiently skilled, disorganized, irrational, uncontrollable, which contributed to vulnerability of certain very important plant species. By controlled field production would be obtained pure, high-quality, typified raw material for the market. By gaining a basic knowledge of technological processing of medicinal plants, would have been complied international standards which this material is subject to. | | | | | | | | | | | | | |
| 1. Educational outcomes   After completion of lectures and exercises student will be qualified and informed with the basic elements of growing technology of medicinal, aromatic and spice plants. After passing the exam, the candidate will be qualified to lead the production of cultivated this plants and to be successful in this production; and will be trained to combine the knowledge, ability and skills with the given environmental and edaphic conditions. At the same time students will be trained to planed, quality collects and prepares medicinal, spice and aromatic plants. | | | | | | | | | | | | | |
| 1. Course content   ***Theoretical teaching***: In the general part will be studied: the definition of the course, division, professional nomenclature and herbal medicinal ingredients. In the next section will be studied: agrotechnical basics of growing of medicinal, aromatic and spice plants, propagation, care, protection, harvesting, drying, primary processing, packaging, storage, transport and benefits of growing. In the primary processing will be studied: stabilization, fermentation, standards and impurities, substitutions, forgeries, and the causes of deterioration of raw materials. Drug use in pharmaceutical, cosmetic, parfumery, food and other industries. Simple forms of drugs from plants. In a separate section will be studied the following plant species per family: I Fam. Apiaceae: fennel, caraway, coriander, anise, dill. II Fam. Lamiaceae: mint, lavender, lemon balm, sage, clary sage, thyme, marjoram, basil. III Fam. Asteraceae: pyrethrum, wormwood, tarragon, chamomile, calendula. IV Fam. Malvaceae: marshmallow. V Fam. Valerianaceae: valerian. VI Fam. Scrophulariaceae: woolly digitalis, purple digitalis. VII Fam. Gentianaceae: gentian.  ***Practical exercises***: Introducing by the herbarium samples of medicinal plants, whole and cut drugs, analysis of mixtures. Estimation of the quality of drugs according to Pharmacopeia. Program of field exercises: Botanical determination, sampling and analysis, exploring the basis of production, propagation, cultivation, care, protection, harvesting, drying, packaging, protection against insects etc. | | | | | | | | | | | | | |
| 1. Teaching methods   Lectures, Practice/ Practical classes, Consultations | | | | | | | | | | | | | |
| Knowledge evaluation (maximum 100 points) | | | | | | | | | | | | | |
| Pre-examination obligations | | | Mandatory | | Points | | Final exam | | | Mandatory | | Points | |
| Activity during lectures | | | Yes | | 5 | | Test I (general part) | | | Yes | | 35 | |
| Colloquium - Test | | | Yes | | 25 | | Test II (special part) | | | Yes | | 35 | |
| Literature | | | | | | | | | | | | | |
| Ord. | Author | | | Title | | | | Publisher | | | | | Year |
|  | John H. Martin, Richard P. Waldren, David L. Stamp | | | Principles of Field Crop Production | | | | Pearson Education Inc., Upper Saddle River, New Jersey, Columbus, Ohio, USA | | | | | 2006 |
|  | Bharat P. Singh | | | Industrial Crops and Uses | | | | Fort Valley State University, Fort Valley, Georgia, USA, CAB International | | | | | 2010 |
|  | Internet sources; Thematic domestic and international journals | | | | | | | | | | | | |
|  | Lecture notes of professors and assistants | | | | | | | | | | | | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Course: | | Fruit growing | | | | | | | | | | | |
| Course id: 3ОХК6И4 | |
| Number of ECTS: 5 | |
| Teacher: | | Slobodan B. Cerović i Sandra M. Bijelić; Borivoje V. Bogdanović | | | | | | | | | | | |
| Course status | | Elective | | | | | | | | | | | |
| Number of active teaching classes (weekly) | | | | | | | | | | | | | |
| Lectures: 2 | | Practical classes: 2 | | | Other teaching types: | | | Study research work: | | | Other classes: | | |
| Precondition courses | | Botany | | | | | | | | | | | |
| 1. Educational goal   Acquiring basic knowledge in the field of fruit growing for the purpose of horticulture. | | | | | | | | | | | | | |
| 1. Educational outcomes   Expertise and ability to independently choose, raise, and nurture decorative fruit species, fruit tree alleys, and fruit plantations according to the needs and specificities of horticulture. | | | | | | | | | | | | | |
| 1. Course content   *Theoretical classes:*  Significance of fruit growing and production of fruits in the world and in Serbia. Fruit growing regions in Serbia. Classification of fruit trees and general biological characteristics of particular fruit species. Ecology of fruit trees: the relation between fruit trees and soil and climate. The influence of terrain position on fruit trees. Propagation of fruit trees and production of nursery stock. Raising and nurturing orchards. Selection of fruit species and cultivars according to the growing system. Pruning of different fruit species aimed at forming the training system. Pruning of mature trees. Native fruit cultivars. Fruit production. Storage and packaging of fruits.  *Practical classes:*  Fruit organs – presentation of fruit organs: root, root collar, trunk, crown, leaf, buds, flower, fruit, and seed of various fruit species.  Recognition of various fruit species according to basic characteristics of one-year-old shoots, leaves, and seeds.  Fruiting branches of fruit trees.  Demonstration of different methods of vegetative propagation.  Raising orchards: Demonstration of agricultural meliorative fertilization and soil preparation. Pruning of fruit trees: Basic principles for pruning different fruit species. Formation of training systems. Pruning mature fruit trees according to different fruit species. | | | | | | | | | | | | | |
| 1. Teaching methods   Theoretical classes with the use of video presentations and practical classes in a laboratory and in the field. | | | | | | | | | | | | | |
| Knowledge evaluation (maximum 100 points) | | | | | | | | | | | | | |
| Pre-examination obligations | | | Mandatory | Points | | | Final exam (izabrati) | | | Mandatory | | Points | |
| Lecture attendance | | | Yes | 10 | | | *Written part of the exam* | | | Yes | | 20 | |
| Test | | | Yes | 50 | | | *Oral part of the exam* | | | Yes | | 10 | |
| Exercise attendance | | | Yes | 10 | | |  | | | | | | |
|  | | |  |  | | |
| Literature | | | | | | | | | | | | | |
| Ord. | Author | | | | | Title | | | Publisher | | | | Year |
|  | Veličković, M. | | | | | Voćarstvo | | | Poljoprivredni fakultet, Zemun | | | | 2002 |
|  | Gvozdenović D., Mićić N. | | | | | Rezidba voćaka | | | Poljoprivredni fakultet, Novi Sad | | | | 1995 |
|  | Keserović. Z., Korać Nada, Magazin N., Grgurević V., Gvozdenović D., Bijelić S., Vračević B. | | | | | Proizvodnja voća i grožđa na malim površinama | | | Univerzitet u Novom Sadu, Poljoprivredni fakultet, Novi Sad | | | | 2008 |
|  | Šoškić, M. | | | | | Voćarstvo | | | Nauka, Beograd | | | | 1991 |

|  |  |  |
| --- | --- | --- |
| Znak univerziteta | UNIVERSITY OF NOVI SAD  FACULTY OF AGRICULTURE 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 8 | Znak fakulteta2 |
| Study Programme Accreditation  UNDERGRADUATE ACADEMIC STUDIES *(*Horticulture*)* |
| Table 5.2 Course specification | | |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Course: | | *Tissue Culture in Horticulture* | | | | | | | | |
| Course id: 3ОХК6И45 | |
| Number of ECTS: 6 | |
| Teacher: | | Branislava R. Gološin, Borivoje V. Bogdanović | | | | | | | | |
| Course status | | Elective | | | | | | | | |
| Number of active teaching classes (weekly) | | | | | | | | | | |
| Lectures: 2 | | Practical classes: 2 | | | Other teaching types: | | Study research work: | | Other classes: | |
| Precondition courses | | Plant physiology | | | | | | | | |
| 1. Educational goal   Acquiring knowledge about the use of non-conventional methods for breeding and propagation of horticultural plants. | | | | | | | | | | |
| 1. Educational outcomes   Students should be enabled to use their knowledge for the improvement of modern production of planting material. | | | | | | | | | | |
| 1. Course content   *Theoretical classes:*  The significance of tissue culture for breeding and propagation of horticultural plants (fruit trees, grapevine and decorative species). Laboratory equipment. Preparation, contents, and selection of a nutrient medium. Cell culture and callus. Somatic embryogenesis and organogenesis. Micro-propagation. Anther and ovary culture. Zygotic embryo culture.  *Practical classes:*  Method for preparing a nutrient medium for micro-propagation, somatic embryogenesis and organogenesis. Sterilization of plant material. Method for isolation of meristems, shoot tip, and other starting explants for vegetative propagation methods in *in vitro* culture. Monitoring the growth of plant material and preparing nutrient mediums for particular phases of growth and development in culture. | | | | | | | | | | |
| 1. Teaching methods   Teaching is conducted with the use of modern techniques. Theoretical classes are conducted in faculty classrooms.  All lectures are computerized and presented. Practical classes are conducted in a laboratory for tissue culture and at the experimental field of the Faculty of Agriculture in Rimski Sancevi. | | | | | | | | | | |
| Knowledge evaluation (maximum 100 points) | | | | | | | | | | |
| Pre-examination obligations | | | Mandatory | Points | | Final exam (izabrati) | | Mandatory | | Points |
| Lecture attendance | | | Yes | 10 | | *Oral part of the exam* | | Yes | | 30 |
| Test | | | Yes | 20 | |  | | | | |
| Exercise attendance | | | Yes | 10 | |
| Term paper | | | Yes | 30 | |
| Literature | | | | | | | | | | |
| Ord. | Author | | Title | | | Publisher | | | | Year |
|  | Dozet, B. i sar. | | Kultura tkiva u poljoprivredi | | | Štamparija FELJTON, Novi Sad | | | | 1995 |
|  | Nešković Mirjana, Konjević, R., Ćulafić Ljubinka | | Fiziologija biljaka | | | NNK-Internacional, Beograd | | | | 2010 |
|  | Taji, Acram, Kumar, P.P, Lakshmanan, P. | | In Vitro Plant Breeding | | | Food Products Press, An Imprint of The Haworth Press, INC. New York.London.Oxford | | | | 2001 |
|  | Kastori R. | | Fiziologija biljaka | | | .:. Feljton, Novi Sad | | | | 1998 |

|  |  |  |
| --- | --- | --- |
| Znak univerziteta | UNIVERSITY OF NOVI SAD  FACULTY OF AGRICULTURE 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 8 | Znak fakulteta2 |
| Study Programme Accreditation  UNDERGRADUATE ACADEMIC STUDIES *(Horticulture)* |
| Table 5.2 Course specification | | |

|  |  |  |
| --- | --- | --- |
| Znak univerziteta | UNIVERSITY OF NOVI SAD  FACULTY OF AGRICULTURE 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 8 | Znak fakulteta2 |
| HORTICULTURE  UNDERGRADUATE ACADEMIC STUDIES |
| Table 5.2 Course specification | | |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Course: | | Viticulture | | | | | | | | |
| Course id: | |
| Number of ECTS: 5 | |
| Teacher: | | Dr Mira Medić | | | | | | | | |
| Course status | | Elective | | | | | | | | |
| Number of active teaching classes (weekly) | | | | | | | | | | |
| Lectures: 30 | | Practical classes: 30 | | | Other teaching types: | | Study research work: | | Other classes: | |
| Precondition courses | | None | | | | | | | | |
| 1. Educational goal   is education and training of undergraduate students from the study programme of horticulture in the field of viticulture. | | | | | | | | | | |
| 1. Educational outcomes   the formation of professionals with academic qualifications, prepared to upgrade their knowledge, in the field of viticulture, with the ultimate goal to use it in the projects of horticulture. | | | | | | | | | | |
| 1. Course content   Theoretical lectures  Introduction: Importance of grapevine and its products. History of vines, grapevine and wine.  Botanical systematics: genaral features of *Vitaceae* family, genera of family *Vitaceae* (with special review on decorative), genus *Vitis* and geographical group in it.  Vineyard establishing: terrain choosening for vineyards, clearing and cleaning of the field, reclamation works before the vineyards establishing, soil trenching, soil preparation for planting and grapevine planting, young vineyard cultivation  Grapevine pruning and training systems : demands for pruning and its importance, biological basis for pruning, training systems, grapevine support systems.  Vineyard cultivation in full production: soil cultivation in vineyard, vineyard fertilization, vineyard irrigation, measures of summer pruning.  Grape harvesting: Grapes ripening monitoring, grapes sampling, organization of grapes harvesting, transport and grapes preservation.  Practical classes  Vine and grapevine vegetative and generative organs review, generative and vegetative propagation, vinestock necessary features for grafting, propagation by cuttings and grafting-review, Young vineyards pruning, with a purpose of training system establishing, vineyard pruning in full production, vineyards planting and support system positioning, grapevine tying, operations of summer pruning, wine grapevine harvesting, table grape harvesting, assortment and packaging. | | | | | | | | | | |
| 1. Teaching methods   Lectures, Practice/ Practical classes, Consultations, study | | | | | | | | | | |
| Knowledge evaluation (maximum 100 points) | | | | | | | | | | |
| Pre-examination obligations | | | Mandatory | Points | | Final exam | | Mandatory | | Points |
| Lecture attendance | | | Yes | 10 | | Oral part of the exam | | Yes | | 30 |
|  | | | | | |  | | | | |
| Exercise attendance | | | Yes | 20 | |
| Test | | | Yes | 40 | |
| Literature | | | | | | | | | | |
| Ord. | Author | | Title | | | Publisher | | | | Year |
|  | Ivan D. Kuljančić | | Vinogradarstvo-vinova loza ta božanska biljka | | | Prometej, Novi Sad | | | | 2007/2008. |
|  | Nebojša Marković | | Tehnologija gajenja vinove loze | | | Poljoprivredni fakultet Zemun I Zadužbina manastira Hilandara | | | | 2012. |
|  | Slavica Todić, Z. Bešlić | | Proizvodnja loznog sadnog materijala | | | Dosije, Beograd | | | | 2010. |
|  | G.D. Bisztray, P. Cindrć, Edit Hajdu, D. Ivanišević, Nada Korać, J. Lazar, Mira Medić, E. Szegedi | | Sorte vinove loze, sadni materijal i bolesti (sorte mađarsko-srpskih pograničnih vinogorja i čišćenje od patogena) | | | Agroinform, Budapest | | | | 2011. |

3OHK6I47 – English II

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Course: | | INTEGRATED AND ORGANIC PRODUCTION | | | | | | | | |
| Course id: | |
| Number of ECTS:5 | |
| Teacher: | | **Keserović Ž. Zoran, Korać S. Nada** | | | | | | | | |
| Course status | | Elective | | | | | | | | |
| Number of active teaching classes (weekly) | | | | | | | | | | |
| Lectures:2 | | Practical classes:2 | | | Other teaching types: | | Study research work: | | Other classes: | |
| Precondition courses | | None | | | | | | | | |
| 1. Educational goal   The goal of course is to provide students with basic knowledge on integral and organic production in orchards and vineyards in the world and in our country. Proper selection of fruit species, cultivars and rootstocks of fruit trees and vines is one of the main factors for successful practicing integrated and organic production. The correct choice of locations and positions is of great importance for the integrated and organic production as well as knowledge of modern and permitted, phytotechnical and sanitary measures. | | | | | | | | | | |
| 1. Educational outcomes   The acquired level of knowledge will enable graduates to independently make appropriate decisions about the choice of site, location, fruit species, varieties and rootstocks of fruit trees and vines, by the methods of integrated and organic farming. Acquired knowledge level allows the student to correctly choose the necessary agrotechnical, pomotechnical and amphelotechnical measures in accordance with the principles of integrated and organic production and to apply them in the plantation. Mistakes that occur during orchard establishment cannot subsequently be corrected therefore, the knowledge in the above case is of great significance for future professionals. | | | | | | | | | | |
| 1. Course content   Theory lessons Concept, importance and principles of integrated and organic fruit and grapes. Integrated and organic production of fruit and grapes in the world and in our legislation. The choice of location and position of the plantation. The choice of species and varieties of fruit trees and vines. The choice of substrates. Planting material. Processing and maintenance of the land. Nutrition of fruit trees and vines. Pests, diseases and weeds. Irrigation. Harvesting and storage of fruits and grapes. Fruit and grapes from organic production. Organic wine. Practical teaching: Exercises Introduction to the domestic and international regulations on integral and organic fruit and grapes. Choice of fruit species and varieties suitable for integrated and organic production. Orchards and vineyards on the principles of integrated and organic production (land preparation, seedlings, planting, care, cover cropping, nutrition, irrigation, pest and disease control). Methods for determining the moment of harvest and storage conditions of fruit and grapes from integrated and organic production. Creating a project to raise organic orchards and vineyards. Production of organic wines. | | | | | | | | | | |
| 1. Teaching methods   Lectures, presentations, films,laboratory work, practical training in the fields of experimental and commercial plantations | | | | | | | | | | |
| Knowledge evaluation (maximum 100 points) | | | | | | | | | | |
| Pre-examination obligations | | | Mandatory | Points | | Final exam (izabrati) | | Mandatory | | Points |
| Lecture attendance | | | Yes | 5 | | *Oral part of the exam* | | Yes | | 30 |
| Test | | | Yes | 5 | |  | | | | |
| Exercise attendance | | | Yes | 20 | |
| Seminar | | | Yes | 40 | |
| Literature | | | | | | | | | | |
| Ord. | Author | | Title | | | Publisher | | | | Year |
|  | Injac, M., Dorić, M., Petrović, J., Tamaš, V., Gošić, J.: Zaštita jabuke u integralnoj i organskoj proizvodnji, Poljoprivredni fakultet Novi Sad, 2013. | | | | | | | | | |
|  | Keserović, Z, Korać, N., Magazin, N., Grgurević, V., Gvozdenović, D., Bijelić, S., Vračević, B: Proizvodnja voća i grožđa na malim površinama, Poljoprivredni fakultet Novi Sad, 2008. | | | | | | | | | |
|  | Keserović, Z., Vračević, B., Magazin, N., Bijelić, S.: Organska proizvodnja voća. Poglavlje u monografiji autora: Lazić, B., Babović, J: Organska poljoprivreda, tom 2, str. 357-413. Institut za ratarstvo i povrtarstvo, Novi Sad, 2008. | | | | | | | | | |
|  | Korać Nada: Organsko vinogradarstvo. Zadužbina Andrejević, Beograd, 2011. | | | | | | | | | |
|  | Korać Nada: Organska proizvodnja grožđa, poglavlje u monografiji autora: Lazić, B., Babović, J: Organska poljoprivreda, tom 2, str. 415-461. Institut za ratarstvo i povrtarstvo, Novi Sad, 2008. | | | | | | | | | |
|  | Lind, K., Lafer, G., Schloffer, K., Innerhofer, G., Meister, H: Organic Fruit Growing, CAB International, 2003. | | | | | | | | | |
|  | Rombough L. : The Grape grower - A Guide to Organic Viticulture. White R. Junc., Vermont, US, 2002. | | | | | | | | | |

|  |  |  |
| --- | --- | --- |
| Znak univerziteta | UNIVERSITY OF NOVI SAD  FACULTY OF AGRICULTURE 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 8 | Znak fakulteta2 |
| Study Programme Accreditation  Undergraduate Academic Studies *(Horticulture)* |
| Table 5.2 Course specification | | |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Course: | | POSTHARVEST AND PACKING TECHNIQUES IN HORTICULTURE | | | | | | | | |
| Course id: | |
| Number of ECTS: 5 | |
| Teacher: | | Nenad P. Magazin | | | | | | | | |
| Course status | | Elective | | | | | | | | |
| Number of active teaching classes (weekly) | | | | | | | | | | |
| Lectures:2 | | Practical classes:2 | | | Other teaching types: | | Study research work: | | Other classes: | |
| Precondition courses | | None | | | | | | | | |
| 1. Educational goal   The goal of course is the acquisition of knowledge in the field of storage and packaging of ornamental plants as well as enabling students to apply this knowledge in practice through direct work in the process of storage and packaging of ornamental plants. The course program learn students about the various aspects of life of ornamental plants after removing them from the substrate or after cutting with cut flowers. Students will learn about the biochemical, physiological and pathological processes in plants after removing them from substrate or after cutting, which is of great practical importance in determining the mode and length of storage. Students will also be familiar with the modern types of storage facilities, with the equipment these objects contain as well as the mode of operation and management. Special attention will be paid to the packaging, as well as modern packaging technology. | | | | | | | | | | |
| 1. Educational outcomes   The acquired level of knowledge will enable graduates to independently make appropriate decisions in the processes from harvest to sale of ornamental plants. Since during storage and transport significant losses occur, acquired knowledge will greatly assist in impairment losses and preserve the quality of ornamental plants. | | | | | | | | | | |
| 1. Course content   Theory lessons Biological properties of ornamental plants, with special emphasis on cut flowers. The biochemical and physiological processes in cut flowers. Technology preservation of ornamental plants. Nonparasitic and parasitic diseases on ornamentals during storage. Packaging for storage and transport. Transport of ornamental plants. New methods of keeping ornamental plants. Treatments on cut flowers. Control of storage conditions. Practical teaching:  Respiration in cut flowers. Proper determination of the regime of storage. Identifying of parasitic nad nonparasitic diseases of ornamentals. Practical demonstration of packaging used for storage and transport. Introducing the coldstore equipment. Facilities for storage of horticultural plants. Visiting the coldstore. | | | | | | | | | | |
| 1. Teaching methods   Lectures, presentations, films,laboratory work, practical training in the fields of experimental and commercial plantations | | | | | | | | | | |
| Knowledge evaluation (maximum 100 points) | | | | | | | | | | |
| Pre-examination obligations | | | Mandatory | Points | | Final exam (izabrati) | | Mandatory | | Points |
| Lecture attendance | | | Yes | 5 | | *Oral part of the exam* | | Yes | | 30 |
| Test | | | Yes | 5 | |  | | | | |
| Exercise attendance | | | Yes | 20 | |
| Seminar | | | Yes | 40 | |
| Literature | | | | | | | | | | |
| Ord. | Author | | Title | | | Publisher | | | | Year |
|  | Ilić, Z., Falik, E., Dardić, M.: Berba, sortiranje, pakovanje i čuvanje povrća, Poljoprivredni fakultet Zubin Potok, 2009. | | | | | | | | | |
|  | Grbić, M., Tehnologija proizvodnje ukrasnih sadnica, Univerzitet u Beogradu, 2010. | | | | | | | | | |
|  | Wills, R., McGlasson, B., Graham, D., Joyce, D.: Postharvest: an introduction to the physiology of fruit, vegetables and ornamentals, CAB International, Velika Britanija, 2007. | | | | | | | | | |

|  |  |  |
| --- | --- | --- |
| Znak univerziteta | UNIVERSITY OF NOVI SAD  FACULTY OF AGRICULTURE 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 8 | Znak fakulteta2 |
| Study Programme Accreditation  Undergraduate Academic Studies *(Horticulture)* |
| Table 5.2 Course specification | | |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Course: | | | *Phytopharmacy* | | | | | | | | |
| Course id:3ОHК7I50 | | |
| Number of ECTS: 5 | | |
| Teacher: | | | Dušanka V. Inđić, Maja U. Meseldžija  Slavica M. Vuković, Maja U. Meseldžija | | | | | | | | |
| Course status | | | Elective | | | | | | | | |
| Number of active teaching classes (weekly) | | | | | | | | | | | |
| Lectures: 2 x 15 = 30 | | Practical classes: 1 x 15 = 15 | | | | Other teaching types: | | Study research work: | | Other classes: | |
| Precondition courses | | Diseases and Pests of fruit trees and vines | | | | | | | | | |
| 1. Educational goal   The aim of the course is to provide basic knowledge about the properties and use of pesticides in horticulture. | | | | | | | | | | | |
| 1. Educational outcomes   Acquired of basic knowledge about of pesticides (fungicides, zoocides, herbicides) in horticulture. | | | | | | | | | | | |
| 1. Course content   *Theoretical classes*:  The main classification of pesticides. The formulations of pesticidal products. Toxicity. Application conditions, the possible effects and assessment as well as the consequences of pesticides application. The importance of mixing pesticides for different purposes. The application of pesticides in orchards. Development and implementation of strategies for pesticide use. Application techniques and fate of pesticides in the environment. Modes of action of pesticides. Pesticide residues, standardization and health aspects. The environmental exposure to pesticides and monitoring.  *Other forms of teaching - laboratory exercises*:  Types of formulations and mode of application; Toxicology and efficacy of pesticides (insecticides, fungicides, herbicides); Phytotoxicity; Mixing pesticides and pesticide substances. Selectivity of pesticides; Methods for bioassay; Determination of resistance. | | | | | | | | | | | |
| 1. Teaching methods   Lectures, Practical classes | | | | | | | | | | | |
| Knowledge evaluation (maximum 100 points) | | | | | | | | | | | |
| Pre-examination obligations | | | | Mandatory | Points | | Final exam (choose) | | Mandatory | | Points |
| Lecture attendance | | | | Yes | 5 | | *Oral part of the exam* | | Yes | | 30 |
| *Written part of the exam* | | Yes | | 40 |
| Test (colloquium) | | | | Yes | 20 | |  | | | | |
| Exercise attendance | | | | Yes | 5 | |
| Literature | | | | | | | | | | | |
| Ord. | Author | | | Title | | | Publisher | | | | Year |
|  | Inđić, D., Vuković, S. | | | Praktikum iz Fitofarmacije (fungicidi, zoocidi) | | | University of Novi Sad, Faculty of Agriculture | | | | 2012 |
|  | Janjić, V., Elezović, I | | | Pesticidi u poljoprivredi i šumarstvu u Srbiji 2010 | | | Plant Protection Society of Serbia, Belgrade | | | | 2010 |
|  | Janjić, V. | | | Fitofarmacija | | | Plant Protection Society of Serbia, Belgrade | | | | 2005 |
|  | Janjić, V. | | | Mehanizam delovanja pesticida | | | Plant Protection Society of Serbia, Belgrade | | | | 2009 |

|  |  |  |
| --- | --- | --- |
| Znak univerziteta | UNIVERSITY OF NOVI SAD  FACULTY OF AGRICULTURE 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 8 | Znak fakulteta2 |
| Study Programme Accreditation  BACHELOR STUDIES OF HORTICULTURE |
| Table 5.2 Course specification | | |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Course: | | ***Flower Arranging*** | | | | | | | | |
| Course id: 3ОХК7И51 | |
| Number of ECTS: 5 | |
| Teacher: | | Jelena I. Ninić-Todorović | | | | | | | | |
| Assistant: | | Jelena D. Čukanović | | | | | | | | |
| Course status | | Elective | | | | | | | | |
| Number of active teaching classes (weekly) | | | | | | | | | | |
| Lectures: 2 | | Practical classes: 2 | | | Other teaching types: | | Study research work: - | | Other classes: - | |
| Precondition courses | | None | | | | | | | | |
| 1. Educational goal   The aim of the course is that students develop creativity in the design of floral arrangements. | | | | | | | | | | |
| 1. Educational outcomes   Establishment of specialists with the ability of creative design, where floral and dendrological material has aesthetic and figurative value. | | | | | | | | | | |
| 1. Course content   Theory:  History of flower arranging, basic shapes and styles of arrangement. Arranging elements: point, line, area. The importance of color in the arrangement, color combinations, contrasts, harmony. Introducing the elements of bouquets, arrangements and wreaths. Special purpose arrangements-kind of decoration, spring, summer, autumn and winter decoration (Christmas decoration). The material for arranging-basic plant material (fresh and dry). Decorative and additional material. Tools and supplies required in the arrangement.  Practical classes:  Creating bouquets, arrangements and wreaths for different purposes using fresh and dry plant material. | | | | | | | | | | |
| 1. Teaching methods   Classes are performed interactively in the form of lectures, exercises and practical classes. Lectures provide a theoretical part followed by characteristic examples for easier understanding of the material. | | | | | | | | | | |
| Knowledge evaluation (maximum 100 points) | | | | | | | | | | |
| Pre-examination obligations | | | Mandatory | Points | | Final exam | | Mandatory | | Points |
| Lecture attendance | | | Yes | 5 | | Practical part of the exam | | Yes | | 25 |
| Exercise attendance | | | Yes | 5 | | Oral part of the exam | | Yes | | 20 |
| Colloquium | | | Yes | 20 | |  | | | | |
| Seminar work | | | Yes | 25 | |
| Literature | | | | | | | | | | |
| Ord. | Author | | Title | | | Publisher | | | | Year |
| 1. | Pryke Paula | | Living Colour | | | Verlag Busse Seewald | | | | 2002. |
| 2. | Westland Pamela | | Classic flower arranging | | | British Library | | | | 1999. |
| 3. | Williams Paul | | Container gardening | | | Dorling Kindersley Limited | | | | 2004. |

|  |  |  |
| --- | --- | --- |
| Znak univerziteta | UNIVERSITY OF NOVI SAD  FACULTY OF AGRICULTURE 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 8 | Znak fakulteta2 |
| Study Programme Accreditation  UNDERGRADUATE ACADEMIC STUDIES  Horticulture |
| Table 5.2 Course specification | | |
|  | | |