

Pomology 1 (152072)

Nositelj predmeta

[prof. dr. sc. Tomislav Jemrić](#)

Opis predmeta

This module deals with chapters from morphology, breeding and ecological conditions for fruit cultivation, physiology of growth and yield and pomo-technical and agro technical measures. Classes include lectures, exercises and field work. Student achieves fundamental knowledge that will be needed for understanding other modules from similar topic and basic skills needed for mastering fruit cultivation.

ECTS: **6.00**

E-učenje: **R1**

Sati nastave: 60

Predavanja: 32

Vježbe u praktikumu: 20

Seminar: 8

Ocjenjivanje

Dovoljan (2): 60 %

Dobar (3): 70 %

Vrlo dobar (4): 80 %

Izvrstan (5): 90 %

Izvođač predavanja

- [prof. dr. sc. Tomislav Jemrić](#)

Izvođač vježbi

- [prof. dr. sc. Tomislav Jemrić](#)
- [dr. sc. Marko Vuković](#)

Izvođač seminara

- [prof. dr. sc. Tomislav Jemrić](#)
- [dr. sc. Marko Vuković](#)

Vrsta predmeta

- Undergraduate studies / [BS Courses taught in English](#) (Izborni predmet, 1. semestar, 1. godina)

Opće kompetencije

The module enables understanding morphological characteristics and physiological manifestations of growth and yield of fruit trees. Students receive theoretical and practical knowledge that is necessary for the understanding materials from other related modules.

Oblici nastave

- Lectures
- Practicum

Exercises deals with morphology of bearing shoots, tasks for calculation of production indicators and in orchard pruning is trained.

- Seminars

Students prepare and present one of the topic from subjects that this module deals by.

Ishodi učenja i način provjere

Ishod učenja	Način provjere
explain the importance of fruit in human diet	written or oral exam
identify and evaluate conditions needed for fruit cultivation	written or oral exam, homework
describe basic physiological processes of growth and yield of fruit trees	written or oral exam, homework
identify different systems of fruit cultivation	written or oral exam
organize and conduct agro-technical measures in orchard during the vegetative period	seminar
recognize and describe different types of bearing shoots on fruit trees	written exam
conduct pruning	practical checkup

Način rada

Obveze nastavnika

Lectures, exercises and seminars

Obveze studenta

Regular attendance to lectures, regular presence to the exams, regular fulfillment of obligations, handing two homework, positively evaluated seminar

Polaganje ispita

Elementi praćenja	Maksimalno bodova ili udio u ocjeni	Bodovna skala ocjena	Ocjena	Broj sati izravne nastave	Ukupni broj sati rada prosječnog studenta	ECTS bodovi
I. i II. homework	8%			12	8	1
Seminar	7%			8	8	1
Partial exam - morphology	10%			8	5	1

Elementi praćenja	Maksimalno bodova ili udio u ocjeni	Bodovna skala ocjena	Ocjena	Broj sati izravne nastave	Ukupni broj sati rada prosječnog studenta	ECTS bodovi
1. midterm exam	38%			16	15	1.5
2. midterm exam	37%			16	15	1.5
Final exam	75%			32	30	3
Total	100%			60	51	6

Elementi praćenja	Opis	Rok	Nadoknada
Seminar	Write a seminar with at least 15 scientific relevant references in accordance with the received instructions and within the deadline set it on the system for e-learning	According to the agreement with the teacher	Obligated work off of the filed exercises
Partial exam - morphology	Answer correctly to at least 60% of the questions in the system for e-learning	According to the agreement with the teacher	Obligated to pass the exam
1. midterm exam	Answer correctly to at least 60% of the questions in the system for e-learning	According to the agreement with the teacher	Obligated to pass the exam
2. midterm exam	Answer correctly to at least 60% of the questions in the system for e-learning	According to the agreement with the teacher	Obligated to pass the exam
Final exam	Answer correctly to at least 60% of the questions in the system for e-learning or satisfactory answer to questions in oral exam	According to the agreement with the teacher	If midterm exams are passed final exam is not obliged

Tjedni plan nastave

1. Introduction and course definition, the state of fruit production in the Republic of Croatia, morphological and physiological characteristics of root system
2. Objective methods for determining optimal harvest date and maturity of apples and pears
3. The morphology of the above-ground parts of fruit trees, types of fruiting and non-fruiting shoot
4. Generative and vegetative propagation of fruit trees, fruit nursery organization, production of nursery plants
5. Ecological and edaphic conditions for the growth and development of fruit trees, the influence of relief.
6. The effect of pruning on growth and fertility, distribution and characteristics of various tree training
7. Practical mastering the basic techniques of pruning and forming tree form
8. Annual and life cycle of fruit trees, growth stages of the tree growth, factors affecting the growth and development of fruit trees
9. The course of differentiation of flower buds, the factors that influence the differentiation, regulation methods of differentiation
10. Phenophases of flowering, relations of fertilization in fruit trees, the role of pollinators
11. Soil management in the orchard, the advantages and disadvantages of different systems
12. The role of fruit thinning in the regulation of fruit tree yielding, ways and thinning agents
13. The growth curve of the fruit, factors affecting fruit growth, dependence of vegetative and generative growth, fruit quality
14. Preparation and presentation of student's seminar papers
15. A visit to the orchard, introduction to technological processes of fruit production in practice and experience of the fruit producers

Obvezna literatura

1. Jemrić, T. 2007 Fruit grafting and pruning, Uliks, Rijeka (In Croatian)
2. Miljković, I. 1991. Modern pomology, Znanje, Zagreb (chosen chapters)
3. Štampar, K. 1966 Pomology 2 (internal script), Poljoprivredni fakultet Zagreb

Preporučena literatura

1. Kozłowski, T. T., Pallardy, S. G. 1997. Growth control in woody plants, Academic press, San Diego
2. Westwood, M. N. 1995. Temperate-zone pomology, physiology and culture, Third edition, Timber Press, Portland, Oregon

Sličan predmet na srodnim sveučilištima

- Fruit growing I, Faculty of Horticultural Science, Corvinus university of Budapest, Hungary