	Tittle of the module: **OLIVE GROWING AND OLIVE OIL TECHNOLOGY**			
Module code	Status of the module	Semester	No. of ECTS	Fund of hours
	Compulsory	II	5	3+1

Study program for which is organized: Master studies in Agriculture Field: Fruit growing and viticulture (studes last 4 semesters, 120 ECTS).	
Conditionality of other modules: No	
Aims of the module: Introduce the students with conditions, agro and pomotechnics for temporary olive growing, conditions for the production of good olive oil, and evaluation of its quality.	
Name and surname of the reacher and assistant: Prof. Dr. Biljana Lazović, Dr. Mirjana Adakalić	
Teaching methods used: Lecture, practical work, field excursions, colloquia, and final exam.	
Module content:	
I week	Botanical affiliation and history of olive cultivation globally and in our country, Biology and morphology
II week	Assortment of olives, the most important varieties grown in the world, Assortment of olives of Montenegro
III week	Ecological conditions for olive cultivation, Fertility, Ripening, Specifics of olive propagation
IV week	Establishing new plantations, choosing a place for planting, choosing varieties, planting
V week	Plantation maintenance; Harvesting of olives, table varieties, and oil varieties **Colloquium** I
VI week	Pruning of olives (cultivation forms, young plant, genus, regenerative) ***Test I***
VII week	Olive oil throughout history, production in the world and in our country; Factors affecting the quality
VIII week	Influence of variety on olive oil quality, ripening, harvesting, transport, and storage of fruit until processing
IX week	Fruit processing: grinding, mixing, phase separation; different processing systems
X week	Oil storage, oil packaging, cleaning, and maintenance of processing plants
XI week	Secondary olive processing products, Biomass, Composition, and characteristics of olive oil
XII week	Analysis and classification of olive oil, quality standards
XIII week	Chemical analysis of olive oil (purity, origin)
XIV week	Sensorial analysis of olive oil **Colloquium** *II*
XV week	Marketing, labeling, protection of origin; olive oil and health ***Test** 2*
XVI week	Final exam
Closing week	Semester verification and grade entry
XVIII-XXI week	Additional classes and remedial exam

STUDENT WORKLOAD

Weekly	During the semester
5 credits x 40/30= 6 hours and 40‘ Structure: - 3 hours of lecturing - 1 hour of practical work - 2 hours and 40‘ individual work of student involving consultations	Teaching and final exam: (6 hours and 40 minutes) x 16 = 106 hours and 40 minutes Necessary preparation before the beginning of the semester (administration, enrollment, certification) 2 x (6h and 40 ') = 13 hours and 20 min. Total load for the subject: 5 x 30 = 150 hours Additional work for exam preparation in the remedial period (up to 30 hours) Load structure: 106 hours and 40 min. (teaching) + 13 hours and 20 min (preparation) +30 hours (additional work)

Literature: K. Miranović (2006): Maslina, Pobjeda, 1-520, Podgorica; I. Kovačić, S. Perica, (1994): Suvremeno maslinarstvo, Dalmacija papir, 1-114, Split; IOOC (1989): Olive pruning, 1-111, Madrid; Barranco: (2002): El Coltivo del Olivo, Madrid; B. Škarica, I. Žužić, M. Bonifačić (1996): Maslina i maslinovo ulje visoke kakvoće u Hrvatskoj, Tisak; O. Koprivnjak (2006): Djevičansko maslinovo ulje, MIH d.o.o., Poreč

Forms of knowledge assessment and grading:

- Attendance: 5 points
- Test: (8 + 7) 15 points
- Colloquium: (2 x 15) 30 points
- Final exam: 50 points

A passing grade is obtained when at least 50 points are collected

Learning outcomes: After passing the exam, the student: Know the history, distribution and importance of olive growing globally and in our country; Can describe the ways and the basic requirements for olive growing according to environmental conditions; Can explain the way of establishing olive groves and the application of agro-technical measures, propagation, pruning, specifics of harvest; He is able to use a descriptor to describe varietal characteristics, to assess the degree of fruit maturity and to determine the moment of harvest; Knows the process of producing olive oil and the factors that affect its quality; Can recognize quality olive oil and distinguish

oils positive and negative attributes; Knows the factors that affect the conditions required for storing olive oil; He is trained for teamwork, critical thinking, knowledge presentation, and teaching evaluation.