Table 5.2. Subject specification

Studying course: *Forestry and Natural Resources Management*
Subject: *Medicinal plants production*
Professor/professors: PhD Dušan D. Jokanović, Associate Professor
Status of the subject: electoral
ECTS number: 5 (five)
Condition: -
Goal of the subject: The main goal of the subject is adopting of new knowledge related to importance, way and technologies of forest and medicinal plants producing.
Result of the subject: Forest experts should be capable for medicinal plants recognizing, they have to know which parts of plants have medicinal properties, then they must have basic knowledge about the ways of collecting, preserving and drying of medicinal plants. There is another very important aspect of the subject – possibility of medicinal plants planting according to some tecnologies and agritechnical measures appllying such as watering, fertilizing, soil preparing, etc.
Content of the subject Theoretical part: History of industrial producing of medicinal plants. Importance of modern producing of medicinal plants on national and international level. Natural site conditions for plantation producing. Yields and effects. Productive methods based on the seed (collecting, sowing, stratificaton methods). Productive methods based on vegetative organs (micropropagation, tissue culture, root dividing, etc). Technologies of producing: planting at open areas, in containers, in closed areas with regulated temperature and humidity of the air. Land processing – care, treatment, protection. Care of the land (spraying, digging, thinning, fullfiling of empty spaces). Prevention (protection from diseases and pests). Watering (drop by drop, surface watering, watering by nozzle using). Feeding: a) organic fertilizers (manure, compost, peat, green fertilizer, humus); b) mineral fertilizers (N, P, K and Ca fertilizers). New trends in medicinal plants producing. Polimers using – organic polimers. New medicinal plants species introducing in plantation production. Practical part*:* It will be organised in different ways such as: a) in labs for Botany and Seed Science; b) in nurseries and hothouses. During this practical part of the teaching process, students will get to know to new trends and technologies related to industrial producing of medicinal plants.
References: 1. Farnsworth, N.R., Akerele, O., Bingel, A.S., Soejarto, D.D., Guo, Z. (1985): Medicinal plants in therapy 2. Chevallier, A. (2016): Encyclopedia of Herbal Medicine: 550 Herbs and Remedies for common ailments

Number of active teaching lessons: 2+2	**Theoretical part of teaching:** 2	**Practical part of teaching:** 2

Methods of giving lectures: There are two classes of practical and two classes of theoretical work per week. The whole teaching process includes overall 60 classes (30+30) during one semester. The main idea is to enable a modern approach to students that can make the subject much easier to them.

Knowledge evaluation (max 100 points)

Before exam obligations:	40 points	**Final exam:** 60 points	
Activity during lectures	5	Writing exam	30
Practical teaching	5	Oral exam	30
Writing tests	10	.....	
Study	20		