



FOR 632 Technology and Mechanization of Wood Harvesting

Compulsory subject – in 6–7th /summer and winter/ semester for Bulgarian students

ECTS credits – 8 Ability to teach a foreign language – **English**

Syllabus in brief

I. Lectures:

- 1. Wood cutting theory** – Characteristic of different types of wood cutting that are used in wood harvesting operations.
- 2. Machines for cutting and primary processing of wood – characteristic and possible use** – motor chain saws, felling machines – two-grip and one-grip harvesters, processors, splitting and chipping machines.
- 3. Machines for off-road transportation of wood – characteristic and possible use in different terrain conditions** – tractors and cable yarders.
- 4. Machines for loading and unloading of wood materials** – types and characteristic.
- 5. Logging systems** – description, characteristic, applicability in different conditions.
- 6. Operational technologies:**
Felling the trees by motor chain saws and felling machines;
Delimiting and bucking by motor chain saws, harvesters and processors;
Off-road transportation of wood by tractors and cable yarders – schemes;
Loading/unloading of wood materials by hydraulic cranes and front-end loaders.
- 7. Assessment of logging systems** – economical and ecological criteria.

II. Exercises:

Planning of logging system according given conditions.

III. Practical training:

Visiting of Training and experimental forest range “Yundola”– watching and discussing of now used logging system.

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