SZKOŁA GŁÓWNA GOSPODARSTWA WIEJSKIEGO

Power tools for woodworking

Educational subject description sheet

Basic information

Field of study Wood Technology **Speciality** - **Organizational unit** Faculty of Wood Technology **Study level** first cycle (engineering degree) **Study form** full-time studies **Education profile** General academic	**Didactic cycle** 2024/25 **Subject code** TDRTDS_D.320K.05408.24 **Lecture languages** english **Mandatory** Elective subjects **Block** Major subjects **Disciplines** Forest science

Coordinator	Radosław Auriga
Teacher	Radosław Auriga

Period Semester 6	**Examination** Pass with grade **Activities and hours** Laboratory exercises: 15	**Number of ECTS points** 1

Goals

Code	Goal
C1	The aim of the course is to familiarize students with power tools for carpentry work and systems of solutions supporting carpentry work.

Subject's learning outcomes

Code	Outcomes in terms of	Effects	Examination methods
Knowledge – Student knows and understands:			
W1	the principle of operation of power tools dedicated to carpentry work	TD_K3_W03, TD_K3_W04_inz	Oral credit, Project
W2	processes occurring during cutting, drilling, milling, joining, grinding and dust removal	TD_K3_W03, TD_K3_W04_inz	Oral credit
Skills – Student can:			
U1	select the appropriate tool and device for a specific type of technological operation	TD_K3_U05_inz, TD_K3_U06_inz	Project
U2	make a critical analysis of the functioning of power tools dedicated to carpentry work	TD_K3_U06_inz	Oral credit
Social competences – Student is ready to:			
K1	use power tools dedicated to carpentry work in a responsible and conscious manner	TD_K3_K01	Project

Study content

No.	Course content	Subject's learning outcomes	Activities
1.	Use of corded and cordless power tools. Organization of a work station with power tools. Classification and characteristics of power tools. Cutting equipment (jigsaws, plunge saws, saws); drills and screwdrivers; surface finishing equipment (grinders); power tools for connecting elements; milling equipment; power tools for gluing edges, dust colection systems dedicated to power tools. Selection of tools for a specific type of machining.	W1, W2, U1, U2, K1	Laboratory exercises

Course advanced

Activities	Methods of conducting classes
Laboratory exercises	Discussion, Presentation, Problem solving

Activities	Examination method	Percentage
Laboratory exercises	Project	50%
Laboratory exercises	Oral credit	50%

Activities	Credit conditions
Laboratory exercises	Design of a simple carpentry object.

Literature

Obligatory

1. Catalogs and materials provided by power tool manufacturers

Calculation of ECTS points

Activity form	**Activity hours***
Laboratory exercises	15
Preparing the project	15
Student workload	**Hours** 30
Number of ECTS points	**ECTS** 1

* hour means 45 minutes

Effects

Code	Content
TD_K3_K01	Absolwent jest gotów do krytycznej oceny posiadanej wiedzy i odbieranych treści
TD_K3_U05_inz	Absolwent potrafi projektować, zgodnie z zadaną specyfikacją, oraz wykonywać typowe dla kierunku studiów proste urządzenia, obiekty, systemy lub realizować procesy, używając odpowiednio dobranych metod, technik, narzędzi i materiałów
TD_K3_U06_inz	Absolwent potrafi dokonać krytycznej analizy sposobu funkcjonowania i ocenić istniejące rozwiązania techniczne, w szczególności urządzenia, systemy i procesy w zakresie technologii drewna, z uwzględnieniem aspektów systemowych i pozatechnicznych, w tym aspektów etycznych
TD_K3_W03	Absolwent zna i rozumie zagadnienia z zakresu technologii, narzędzi i materiałów stosowanych przy rozwiązywaniu zadań inżynierskich z zakresu szeroko pojętego drzewnictwa
TD_K3_W04_inz	Absolwent zna i rozumie podstawowe zagadnienia dotyczące procesów zachodzących w cyklu życia urządzeń, obiektów i systemów technicznych stosowanych w przemyśle drzewnym