Course Description Form

1. Course Name:
WoodIndustries
2. Course Code:
WOIN499
3. Semester / Year:
Autumn semester / 2024-2025
4. Description Preparation Date:
1 / 9 / 2024
5. Available Attendance Forms:
Integrated
6. Number of Credit Hours (Total) / Number of Units (Total)
The total number of hours is 75 hours / 2 Theoretical + 3 practical / 3.5 units
7. Course administrator's name (mention all, if more than one name)
Name: Dr. Karam Ali Younus ALtaee Email: karam.youns@uomosul.edu.iq Name: Hanan Ghanem Saadallah

8. Course Objectives

theoretical: - Developing the student's ability to deal with scientific and technical means - Developing the student's ability to deal with the Internet - Developing the student's ability to deal with multiple media. - Developing the student's ability to dialogue and discuss Developing the student's ability to deal economically in the field the job.	Practical : -Developing the student's ability to deal with multiple media. - Developing the student's ability to dialogue and discuss

9. Teaching and Learning Strategies

Strategy	-Interactive lecture, Brainstorming, - Dialogue and discussion, - Assigning tasks and reporting - Assigning group work to reveal leadership skills

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2 theoretical 3 practical.	theoretical: a1: Identification (glues and some terminology - a number of benefits and limitations of bonding with glues) a2: Explains (what the glue bond consists of and what are the reasons for the collapse or failure of adhesion - the requirements must be met for the	theoretical: Glues and some terms, benefits and determinants of glue bonding practical : Adhesive glues	theoretical : -Auditory methods, -Style of writing on The black board. -Direct dialogue style	Exams, Homework, Reports

		glue to perform its function) practical : a15: Identifying (glues) a16: Explains (how to bond with glue materials - the benefits and disadvantages of using glues		Practical : Assigning tasks and reports	
2	2 theoretical 3 practical	theoretical: a3: What is it (classification of physical, chemical and physicochem hardening processes - types of glues of natural origin and industrial glues)) a4: Explains (substances that are added to improve one or more characteristics of the glue in order for it to perform its function - the factors that determine the choice of glue, the forms of adhesion, the factors affecting the glue process) practical : a17: Understands (gums of natural origin... plant, animal and casein) a18: Explains (glues of industrial origin - methods of preparing synthetic industrial glues)	Theoretical: Hardening glues, types of glues, additives, influencing factors, and forms of adhesion practical : Types of glues and methods of preparing them	Theory : -Auditory methods, -Style of writing on The black board. -Direct dialogue style Practical : Assigning tasks and reports	Exams, Homework, Reports
3	2 theoretical 3 practical	theoretical: a5: Identify (specifications of columns, types of wood used as columns, methods of drying them their sources - methods of scraping columns and their importance, and structuring columns before treatment with preservatives) a6: Explains (the division preservatives, methods of using them, the causes of the collapse of columns treated with preservatives) practical a19: Number of published plates and their sections. A20: Explains (the number and tools used in manufacturing and the benefits of each, with an explanation of how to use them in the laboratory)?	theoretical: Column timber practical : Manufacture of sawn wood panels	theoretical : -Auditory methods, -Style of writing on The black board. -Direct dialogue style Practical : Assigning tasks and reports	Exams, Homework, Reports
4	2 theoretical 3 practical	theoretical: a 7: Identify (its importance, types of mine timber, and desired requirements for mine timber) a8: Number of (types of wood	theoretical: Mine timber practical : Manufacture of sawn wood panels	theoretical : -Auditory methods, -Style of writing on The black	Exams, Homework, Reports

		used in mines and the importance of peeling and drying them) practical : a2 1: Identify (manufacturing stages: segmentation, longitudinal sawing, and transverse cutting) a22: What is (the drying, leveling and flattening stage)		board. -Direct dialogue style Practical : Assigning tasks and reports	
5	2 theoretical 3 practical	theoretical: b 1: Distinguish (classification of railway sleepers, what are the reasons for their spread and disadvantages of their use – factors that help increase the life of railway sleepers) b2: Compare (types of wood used in railway sleepers – railway specifications) practical : b8: Distinguish (saws used in process of manufacturing sawn boards) b9: Compare (types of drying – drying methods	theoretical: Railway sleepers practical : Manufacture of boards and drying of sawn boards	theoretical : -Auditory methods, -Style of writing on The black board. -Direct dialogue style Practical : Assigning tasks and reports	Exams, Homework, Reports
6	2 theoretical 3 practical	theoretical: a 9: Explains (a brief overview of the of wood and the classification of sawn boards - the machines contribute to the splitting process what considerations must be available in air drying yards) b3: The foundations for good stacking of boards inside the ovens and the stages of manufacturing sawn wood boards practical : a23: Explains (chipboards and reasons for preferring wood species in them - the primary sources involved in manufacturing) b10: Distinguish the stages of manufacturing compressed wood: the stage of converting large wood, the tools used, and the types of wood grains	theoretical: Manufacture of sawn wood panels practical: Manufacture of particle board	theoretical : -Auditory methods, -Style of writing on The black board. -Direct dialogue style Practical : Assigning tasks and reports	Exams, Homework, Reports
7	2 theoretical 3 practical	theoretical: c1: How to differentiate (layer glued compositions are made in forms - the benefits of layered glued compositions and the obstacles limit the production of layered	Theoretical: Layered glued timber practical : Manufacture of particle board	theoretical : -Auditory methods, -Style of writing on The black	Exams, Homework, Reports

		glued compositions – the layered compositions differ from each other according to – a scientific visit to the Preparatory School Industry / Carpentry Department) a10: What are (the requirements layer-glued compositions – the factors affecting the strength of the layer-glued composition – the types of wood used in the manufacture of layer-glued compositions) practical : a24: Explains (the drying stage, types of dryers and methods of using them, classification, adding glue and mixing it - the stage of preparing the mat, hot pressing, conditioning, edge trimming and polishing) a 25: What are the factors affecting the properties of compressed wood??		board. -Direct dialogue style Practical : Assigning tasks and reports	
8	2 theoretical 3 practical	theoretical: a 10: What are (the requirements layer-glued compositions – the factors affecting the strength of the layer-glued composition – the types of wood used in the manufacture of layer-glued compositions) practical : a 25: What are (the factors affecting the properties of compressed wood) b11: Compare (the benefits of layer-glued wood?	theoretical: Layered glued timber practical : Layered glued timber	theoretical : -Auditory methods, -Style of writing on The black board. -Direct dialogue style Practical : Assigning tasks and reports	Exams, Homework, Reports
9	2 theoretical 3 practical	theoretical: c2: Distinguish (characteristics of wood used to produce compressed wood - specifications and materials used in manufacturing compressed wood) a11: Explains (there are materials added to the board for the purpose of improving some of board's properties - factors affecting the properties of compressed wood) practical a 27: Explain (the obstacles and issues that limit the production of layer-glued wood - working manufacturing conditions)?	theoretica: Compressed wood production practical : Layered glued timber	theoretica : -Auditory methods, -Style of writing on The black board. -Direct dialogue style Practical : Assigning tasks and reports	Exams, Homework, Reports

		a28: What are (the types of wood used layered compositions)			
10	2 theoretical 3 practical	theoretical: b4: Compare (the bond between wood cement - means of reducing obstruction to the cement hardening process - production of cement wood boards) practical : a29: Explains (the definition of coal what coal deposits are made of) a30: What are (types of coal)	theoretical: Cement wood panels practical : Coal industry	theoretical : -Auditory methods, -Style of writing on The black board. -Direct dialogue style Practical : Assigning tasks and reports	Exams, Homework, Reports
11	2 theoretical 3 practical	theoretical: c3: Compare (the most important coatings used in the field manufacturing wood composites - method of manufacturing Formica) practical : c5: Distinguish (watch explanatory films about the method of manufacturing charcoal))	Theoretical: Wooden vehicle covers practical : Coal industry	theoretical : -Auditory methods, -Style of writing on The black board. -Direct dialogue style Practical : Assigning tasks and reports	Exams, Homework, Reports
12	2 theoretical 3 practical	theoretical: a12: Explain (the destructive distillation process includes sev stages) c4: Differentiate (destructive distillation of hard and soft wood - charcoal industry) practical: a31: Explains (what it is and what are the reasons for its production?) b12: Differentiate between (traditional charcoal production methods and modern ovens, their advantages and disadvantages	theoretical: Destructive distillation wood practical : Charcoal	theoretical : -Auditory methods, -Style of writing on The black board. -Direct dialogue style Practical : Assigning tasks and reports	Exams, Homework, Reports
13	2 theoretical 3 practical	theoretical: a13: Introduction (a brief history of paper industry) b5: How can you (prepare wood making dough - raw materials for making dough - a scientific visit to	theoretical: Paper Industry practical : Charcoal	theoretical : -Auditory methods, -Style of writing on The black	Exams, Homework, Reports

		wood factories) practical : a32: Explains (see some boards models for wood industries) b13: Compare (charcoal in Iraq and its production problems)		board. -Direct dialogue style Practical : Assigning tasks and reports	
14	2 theoretical 3 practical	theoretical: a14: Identification (mechanical method) b6: Differentiate (chemical methods - semi-chemical or chemical-mechanical methods – wood) practical : a32: Explains (see some boards and models for wood industries)	theoretical: Dough manufacturing methods practical : Field observation - field visits	theoretical : -Auditory methods, -Style of writing on The black board. -Direct dialogue style Practical : Assigning tasks and reports	Exams, Homework, Reports
15	2 theoretical 3 practical	theoretical: b 7: Distinguish (the process of manufacturing wood chips - peeling and cleaning wood – the benefits of plywood panels) Practical: b14: Distinguish (field observations – field visits	theoretical: Wood chip industry practical : Field observation - field visits	theoretical : -Auditory methods, -Style of writing on The black board. -Direct dialogue style Practical : Assigning tasks and reports	Exams, Homework, Reports

11. Course Evaluation

	Evaluation Methods	Evaluation Date	Degree	Relative weight %
	Final report theoretical + pract. Report	theoretical 15 weeks Pract. 1-15 week	7 theoretical + 6 pract.	% 13
	Short exam (1)	Week (3)	4 theoretical + 2 pract.	% 6
	Half exam (theoretical + pract.)	Week (9)	10 theoretical + 5 pract.	% 15
	Short exam (2)	Week (12)	4 theoretical + 2 pract.	% 6
	Final exam (practical)	Exam pract.	20	% 20
	Final exam (theoretical)	Exam theoretical	40	% 40
			100	% 100

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Wooden industries - Dr. Walid Aboudi qasir
Main references (sources)	Books related to wood industries
Recommended books and references (scientific journals, reports...)	Scientific journals, reports and research related to wood industri

Theoretical subject teacher: Dr. Karam Ali Younus ALtaee

Practical subject teacher: M.M. Hanan Ghanem Saadallah

Chairman of the Scientific Committee. : Prof. Dr. Muhammad Yunus Al-Alaaf

Head of the Department of Forestry Sciences: Prof. Dr. Muzahim Saeed Al-Bek

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