Course Description Form

1. Course Name:
WoodIndustries
2. Course Code:
WOIN499
3. Semester / Year:
Autumn semester / 2023-2024
4. Description Preparation Date:
1 / 2 / 2024
5. Available Attendance Forms:
Attendance
6. Number of Credit Hours (Total) / Number of Units (Total)
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 Pract.	theoretical: a1: Identification (glues and sc terminology - a number of benefits limitations of bonding with glues) a2: Explains (what the glue bond cons of and what are the reasons for collapse or failure of adhesion - requirements must be met for the glu	theoretical: Glues and some terms, benefits and determinants glue bonding practical : Adhesive glues	theoretic -Auditor methods, -Style of writing o The blackboa -Direct	Exams, Homework, Reports

		perform its function) practical : a15: Identifying (glues) a16: Explains (how to bond with glue materials - the benefits and disadvantag of using glues		dialogue style Practical Assignin tasks and repo	
2	2 theoretical 3 Pract	theoretical: a3: What is it (classification of physi chemical and physicochemical harder processes - types of glues of natural or and industrial glues)) a4: Explains (substances that are adde improve one or more characteristics of glue in order for it to perform its funct - the factors that determine the choice glue, the forms of adhesion, and factors affecting the glue process) practical : a17: Understands (gums of nat origin... plant, animal and casein) a18: Explains (glues of industrial orig methods of preparing synthetic industri glues)	Theoretical: Hardening glues, types of glues, additives, influenci factors, and forms of adhesion practical : Types of glues and metho of preparing them	Theory : -Auditor methods, -Style of writing o The blackboa -Direct dialogue style Practical Assignin tasks and repo	Exams, Homework, Reports
3	2 theoretical 3 Pract	theoretical: a5: Identify (specifications of colun types of wood used as columns, meth of drying them and their source methods of scraping columns and t importance, and structuring colu before treatment with preservatives) a6: Explains (the division preservatives, methods of using them, the causes of the collapse of colu treated with preservatives) practical a19: Number of published plates and their sections. A20: Explains (the numb and tools used in manufacturing and th benefits of each, with an explanation o how to use them in the laboratory)?	theoretical: Column timber practical : Manufacture of sawn woo panels	theoretic -Auditor methods, -Style of writing o The blackboa -Direct dialogue style Practical Assignin tasks and repo	Exams, Homework, Reports
4	2 theoretical 3 Pract	theoretical: a 7: Identify (its importance, types mine timber, and desired requirements mine timber) a8: Number of (types of wood used mines and the importance of peeling drying them) practical : a2 1: Identify (manufacturing sta segmentation, longitudinal sawing, transverse cutting) a22: What is (the drying, leveling and flattening stage)	theoretical: Mine timber practical : Manufacture of sawn woo panels	theoretic -Auditor methods, -Style of writing o The blackboa -Direct dialogue style Practical Assignin tasks	Exams, Homework, Reports

				and repo	
5	2 theoretical 3 Pract	theoretical: b 1: Distinguish (classification of railv sleepers, what are the reasons for t spread and the disadvantages of their u factors that help increase the life railway sleepers) b2: Compare (types of wood used railway sleepers - railway specification 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 an drying of sawn boards	theoretic -Auditor methods, -Style of writing o The blackboa -Direct dialogue style Practical Assignin tasks and repo	Exams, Homework, Reports
6	2 theoretical 3 Pract	theoretical: a 9: Explains (a brief overview of the of wood and the classification of sa boards - the machines that contribute the splitting process and w considerations must be available in drying yards) b3: The foundations for good stacking boards inside the ovens and the stages manufacturing sawn wood boards practical : a23: Explains (chipboards and reasons for preferring wood species them - the primary sources involved manufacturing) b10: Distinguish the stages of manufacturing compressed wood: the stage of converting large wood, the too used, and the types of wood grains	theoretical: Manufacture of sawn woo panels practical: Manufacture of particle board	theoretic -Auditor methods, -Style of writing o The blackboa -Direct dialogue style Practical Assignin tasks and repo	Exams, Homework, Reports
7	2 theoretical 3 Pract	theoretical: c1: How to differentiate (layer gl compositions are made in two forms - benefits of layered glued compositi and the obstacles that limit the product of layered glued compositions - layered compositions differ from e other according to - a scientific visit to Preparatory School of Industry Carpentry Department) a10: What are (the requirements layer-glued compositions - the fac affecting the strength of the layer-gl composition - the types of wood used the manufacture of layer-gl compositions) practical : a24: Explains (the drying stage, types dryers and methods of using th classification, adding glue and mixing	Theoretical: Layered glued timber practical : Manufacture of particle board	theoretic -Auditor methods, -Style of writing o The blackboa -Direct dialogue style Practical Assignin tasks and repo	Exams, Homework, Reports

		the stage of preparing the mat, pressing, conditioning, edge trimming polishing) a 25: What are the factors affecting the properties of compressed wood??			
8	2 theoretical 3 Pract	theoretical: a 10: What are (the requirements layer-glued compositions - the fac affecting the strength of the layer-gl composition - the types of wood used the manufacture of layer-gl compositions) practical : a 25: What are (the factors affecting properties of compressed wood) b11: Compare (the benefits of lay glued wood?	theoretical: Layered glued timber practical : Layered glued timber	theoretic -Auditor methods, -Style of writing o The blackboa -Direct dialogue style Practical Assignin tasks and repo	Exams, Homework, Reports
9	2 theoretical 3 Pract	theoretical: c2: Distinguish (characteristics of wood used to produce compressed woo specifications and materials used manufacturing compressed wood) a11: Explains (there are materials ad to the board for the purpose of improv some of the board's properties - fac affecting the properties of compres wood) practical a 27: Explain (the obstacles and iss that limit the production of layer-gl wood - working or manufactur conditions)? a28: What are (the types of wood used layered compositions)	theoretica: Compressed wood production practical : Layered glued timber	theoretic -Auditor methods, -Style of writing o The blackboa -Direct dialogue style Practical Assignin tasks and repo	Exams, Homework, Reports
10	2 theoretical 3 Pract	theoretical: b4: Compare (the bond between wood cement - means of reducing obstructio the cement hardening process - produc 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	theoretic -Auditor methods, -Style of writing o The blackboa -Direct dialogue style Practical Assignin tasks and repo	Exams, Homework, Reports
11	2 theoretical 3 Pract	theoretical: c3: Compare (the most important coati used in the field of manufacturing w composites - the method of manufactu	Theoretical: Wooden vehicle covers practical : Coal industry	theoretic -Auditor methods, -Style of	Exams, Homework, Reports

		Formica) practical : c5: Distinguish (watch explanatory fil about the method of manufacturing charcoal))		writing o The blackboa -Direct dialogue style Practical Assignin tasks and repo	
12	2 theoretical 3 Pract	theoretical: a12: Explain (the destructive distilla process includes several stages) c4: Differentiate (destructive distilla of hard and soft wood - charcoal indust practical: a31: Explains (what it is and what are reasons for its production?) b12: Differentiate between (traditiona charcoal production methods and mode ovens, their advantages and disadvanta	theoretical: Destructive distillation wood practical : Charcoal	theoretic -Auditor methods, -Style of writing o The blackboa -Direct dialogue style Practical Assignin tasks and repo	Exams, Homework, Reports
13	2 theoretical 3 Pract	theoretical: a13: Introduction (a brief history of paper industry) b5: How can you (prepare wood making dough - raw materials for mak dough - a scientific visit to w factories) practical : a32: Explains (see some boards models for wood industries) b13: Compare (charcoal in Iraq and its production problems)	theoretical: Paper Industry practical : Charcoal	theoretic -Auditor methods, -Style of writing o The blackboa -Direct dialogue style Practical Assignin tasks and repo	Exams, Homework, Reports
14	2 theoretical 3 Pract	theoretical: a14: Identification (mechanical method b6: Differentiate (chemical method semi-chemical or chemical-mechan methods - wood) practical : a32: Explains (see some boards and models for wood industries)	theoretical: Dough manufactur methods practical : Field observation - field visits	theoretic -Auditor methods, -Style of writing o The blackboa -Direct dialogue style Practical Assignin tasks and repo	Exams, Homework, Reports
15	2 theoretical	theoretical:	theoretical:	theoretic	Exams,

	3 Pract	b 7: Distinguish (the process of manufacturing wood chips - peeling an cleaning wood - the benefits of plywoo panels) Practical: b14: Distinguish (field observations - f visits	Wood chip industry practical : Field observation - field visits	-Auditor methods, -Style of writing o The blackboa -Direct dialogue style Practical Assignin tasks and repo	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.	% ١٣
	Short exam (1)	Week (3)	4 theoretical + 2 pract.	% ٦
	Half exam (theoretical + pract.)	Week (9)	10 theoretical + 5 pract.	% ١٥
	Short exam (2)	Week (12)	4 theoretical + 2 pract.	% ٦
	Final exam (practical)	Exam pract.	20	% ٢٠
	Final exam (theoretical)	Exam theoretical	40	% ٤٠
			100	% ١٠٠

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 Younis Al-Allaf

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