

Course Description Form

1. Course Name:	
Tractors	
2. Course Code:	
TRAC134	
3. Semester / Year:	
Fall /2023–2024	
4. Description Preparation Date:	
5. Available Attendance Forms:	
In Class	
6. Number of Credit Hours (Total) / Number of Units (Total)	
5 hours + 3.5 units	
7. Course administrator's name (mention all, if more than one name)	
Name: Khalid E. Ahmed Amar Wael AL-Jiboree Email: khalid.allaaf@uomosul.edu.iq	
8. Course Objectives	
That the learner be able to identify the parts of agricultural workers Differentiation between the types of motors (diesel and gasoline) <ul style="list-style-type: none">• Distinguishing between the types of agricultural workers, according to which they were made• Knowledge of what the engine needs to work in the best conditions• The learner's awareness of the factors affecting the performance of the withdrawal	
9. Teaching and Learning Strategies	
Strategy	interactive lecture Brainstorming Dialogue and discussion Field Training Practical exercises Field project

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2theoretical	a1,a2 the student gets acquainted with all kinds of transportation	Mechanical motion transporting	Interactive lecture, brainstorming, dialogue and discussion, self-learning	Quiz and midterm exam
	3 practical	c2 how this device work	Mechanical motion transporting	The device is viewed in the laboratory or through video clips	Quiz and midterm exam
2	2theoretical	a2, a4 identifies the types of pullers according to the purpose of their use	Tractors classification	Interactive lecture, brainstorming, dialogue and discussion, self-learning	Quiz and midterm exam
	3 practical	c2 the student classifies the tractors according to the purpose of use	Tractors classification	The device is viewed in the laboratory or through video clips	Quiz and midterm exam
3	2theoretical	c2,a4 the student distinguishes between a four stroke and two stroke engine	The construction of four and two stroke of engine	Interactive lecture, brainstorming, dialogue and discussion, self-learning	Quiz and midterm exam
	3 practical	c2 the student now mode of work	The construction of four and two stroke of engine	The device is viewed in the laboratory or through video clips	Quiz and midterm exam
4	2theoretical	a1,a2 construction of diesel engine	Diesel engine		
	3 practical	c2 the student can explain work of engine	Diesel engine	The device is viewed in the laboratory or through video clips	Quiz and midterm exam
5	2theoretical	a1,a2 construction of auto engine	Auto engine	Interactive lecture, brainstorming, dialogue and discussion, self-learning	Quiz and midterm exam

	3 practical	c2 the student can explain work of engine	Auto engine	The device is viewed in the laboratory or through video clips	Quiz and midterm exam
6	2theoretical	a3 calculating stroke and cylinder volume	Engine volume and power stroke sequence	Interactive lecture, brainstorming, dialogue and discussion, self-learning	Quiz and midterm exam
	3 practical	a3 find the engine volume	Engine volume and power stroke sequence	Interactive lecture, brainstorming, dialogue and discussion, self-learning	Quiz and midterm exam
7	2theoretical	a4 the student understands the sequence of strokes	Cooling, lubricating and fuel system	Interactive lecture, brainstorming, dialogue and discussion, self-learning	Quiz and midterm exam
	3 practical	c2 the student can explain work of device	Cooling, lubricating and fuel system	The device is viewed in the laboratory or through video clips	Quiz and midterm exam
8	2theoretical	a2 understanding timing device	Timing device	Interactive lecture, brainstorming, dialogue and discussion, self-learning	Quiz and midterm exam
	3 practical	c2 the student describes how the device works	Timing device	The device is viewed in the laboratory or through video clips	Quiz and midterm exam
9	2theoretical	a2the student knows the components and function of the separator device	Clutch device	Interactive lecture, brainstorming, dialogue and discussion, self-learning	Quiz and midterm exam
	3 practical	c2 the student sees the components and operation of the device	Clutch device	The device is viewed in the laboratory or through video clips	Quiz and midterm exam

10	2theoretical	b4 the student understands the operation and components of the gearbox device	Gear box	Interactive lecture, brainstorming, dialogue and discussion, self-learning	Quiz and midterm exam
	3 practical	c2 the student sees the components and operation of the device	Gear box	The device is viewed in the laboratory or through video clips	Quiz and midterm exam
11	2theoretical	b2 the student shows the rear axle	Rear axle	Interactive lecture, brainstorming, dialogue and discussion, self-learning	Quiz and midterm exam
	3 practical	c2 the student sees the components and operation of the device	Rear axle	The device is viewed in the laboratory or through video clips	Quiz and midterm exam
12	2theoretical	b2 student describes the tug contact device	Ground contact device	Interactive lecture, brainstorming, dialogue and discussion, self-learning	Quiz and midterm exam
	3 practical	c2 the student sees the components and operation of the device	Ground contact device	The device is viewed in the laboratory or through video clips	Quiz and midterm exam
13	2theoretical	a2 student describes the starting device	Self starter	Interactive lecture, brainstorming, dialogue and discussion, self-learning	Quiz and midterm exam
	3 practical	c2 the student sees the components and operation of the device	Self starter	The device is viewed in the laboratory or through video clips	Quiz and midterm exam
14	2theoretical	a2 the student understands the operation of the hydraulic device and its components	Hydraulic system	Interactive lecture, brainstorming, dialogue and discussion, self-learning	Quiz and midterm exam

	3 practical	c2 the student sees the components and operation of the device	Hydronic system	The device is viewed in the laboratory or through video clips	Quiz and midterm exam
15	2 theoretical	b2 preparing report		Seminar	discussions
	3 practical	b2 preparing report		Seminar	discussions

11. Course Evaluation

No.	Test type	Date	Grad	percentage
1	Theoretical +practical reports	Week 15	2.5 + 2.5	10%
2	Theoretical +practical Quizzes	1-14 week	2.5+2.5	5%
3	Theoretical +practical midterm exam	Week 8	Theoretical 17.5+ practical 7.5	25%
4	theoretical final exam	Final week	40	40%
5	Practical final exam	Final week	20	20%
			100	

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	ت، عبد السلام محمود و لطفي حسين محمد (1979) الساحبات الزراعية، وزارة التعليم العالي والبحث العلمي، جامعة بغداد .
Main references (sources)	
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	



مدرس المادة العملي
م.م. عمار وائل



رئيس قسم المكنات والآلات الزراعية
أ.م.نوفل عيسى محييد



مدرس المادة النظري
م. خالد عصام احمد

رئيس اللجنة العلمية
أ.د. أركان محمداً أمين صديق