

## Course Description Form

1. Course Name:					
Stored Products Pests					
2. Course Code:					
STPP419					
3. Second Semester / Year: 2024-2025					
4 <sup>th</sup> First season					
4. Description Preparation Date: quarterly					
1/2/2025					
5. Available Attendance Forms: groups					
Groups					
6. Number of Credit Hours (Total) / Number of Units (Total)75					
75 / 3.5 U.					
7. Course administrator's name (mention all, if more than one name)					
Name: Dr. Emad Q. Mohammed Alebady Email: <a href="mailto:emad_alebady@uomosul.edu.iq">emad_alebady@uomosul.edu.iq</a> Ekhlās Ziyad Mohammed Email: <a href="mailto:ekhlās.1977@uomosul.edu.iq">ekhlās.1977@uomosul.edu.iq</a>					
8. Course Objectives					
Course Objectives	<ul style="list-style-type: none"> <li>Objectives of the course 1. Ask questions of conclusiveness at all</li> <li>Development of training programmes</li> <li>Finding solutions to students' problems and constraints in the uncle</li> <li>4. Enabling students to find solutions and applications for</li> <li>outstanding attitudes</li> </ul>				
9. Teaching and Learning Strategies					
Strategy	<ul style="list-style-type: none"> <li>Provide students with additional basics and topics related to biological resistance</li> <li>Students asked a range of questions during the course</li> <li>Giving students home duties requires self-explanations in ways of cause</li> </ul>				
10. Course Structure					
Week	Hours	Required Learning	Unit or subject name	Learning	Evaluation





		Outcomes		method	method
1	5	Theoretical : a1: Introduction - The importance of grains Practical : c1: Introduction to cereals, nutritional value of cereals and associated deterioration spoilage for stored grain	Introduction - The importance of grains  Introduction to cereals, nutritional value of cereals associated deterioration spoilage for stored grain	Display data on grain storage and traditional methods of grain storage	Quarterly and short exams, reports discussion
2	5	Theoretical a1: Storage and methods of storing grains, grain spoilage phenomena Practical: c1: Insect groups to which store pests belong	Storage and methods of storing grains, grain spoilage phenomena  Insect groups to which store pests belong	Show photos and video	Quarterly and short exams, reports discussion
3	5	Theoretical: d3: Estimation moisture in grains their products, insect damage to stored materials, methods for estimating moisture content Practical: c1: Functional structural adaptation store house insects to most important sources of infestation	Estimation of moisture grains and their products, insect damage to stored materials, methods estimating moisture content  Functional and structural adaptation of store house insects to most important sources of infestation	methods estimating moisture content	Quarterly and short exams, reports discussion
4	5	Theoretical: a1: Losses resulting from insect pests of grains their products. Pictures diagrams of insect damage warehouses Practical: c1 : Seasonal exam	Losses resulting from insect pests of grains their products. Pictures diagrams of insect damage to warehouses  Seasonal exam	Pictures diagrams of insect damage warehouses	Quarterly and short exams, reports discussion
5	5	Theoretical: a1: Groups of insects of stored materials, examples of groups warehouse insects their types Practical: c1: Methods used in	Groups of insects of stored materials, examples of groups warehouse insects and their types Methods used in laboratory to detect infections that from inside the grain	examples of groups warehouse insects and their types	Quarterly and short exams, reports discussion



		the laboratory to detect infections that from inside the grains			
6	5	<p>Theoretical: a1: The life of grain insects economically important stored materials in Iraq, environment of grain insects and their costs, displaying cycles of warehouse insects via the Dacho projector</p> <p>Practical: c1: Biology of some warehouse pests (penetration of small grain and khabra)</p>	<p>The life of grain insects economically important stored materials in Iraq, environment of grain insects and their costs, displaying the cycles of warehouse insects via the Dacho projector.</p> <p>Biology of some Warehouse pests (penetration of small grain and khabra)</p>	<p>The life of grain insects and economically important stored materials in Iraq, environment grain insects and their costs, displaying cycles warehouse insects via Dacho projector.</p>	<p>Quarterly and short exams, reports discussion</p>
7	5	<p>Theoretical: a1: Environmental factors and their relationship insects of stored materials, insect population in</p> <p>Practical: c1: Rusty and similar flour beetles (saw grain beetle)</p>	<p>Environmental factors their relationship to insects of stored materials, insect population in</p> <p>Rusty and similar flour beetles (saw grain beetle)</p>	<p>warehouses, detailed explanation of environmental factors that affect the lives of warehouse insects.</p>	<p>Quarterly and short exams, reports discussion</p>
8	5	<p>Theoretical: a1: Sources of warehouse insect infestation,</p> <p>Practical: c1: Cheese fly and small fruit</p>	<p>Sources of warehouse insect infestation,</p> <p>Cheese fly and small fruit fly</p>	<p>warehouses, detailed explanation of environmental factors that affect the lives of warehouse insects.</p>	<p>Quarterly and short exams, reports discussion</p>
9	5	<p>Theoretical: a1: Selecting stored grain insects for their preferred hosts</p> <p>Practical: c1: Indian flour moth and spider beetle</p>	<p>Selecting stored grain insects for their preferred hosts</p> <p>Indian flour moth and spider beetle</p>	<p>warehouses, detailed explanation of environmental factors that affect the lives of warehouse insects</p>	<p>Quarterly and short exams, reports discussion</p>
10	5	<p>Theoretical: a1: Methods of</p>	<p>Methods of controlling insects in grain and</p>	<p>warehouses, detailed</p>	<p>Quarterly</p>





		controlling insects in grains and stored materials Practical: c1: Book louse cigarette or tobacco beetle	stored materials  Book louse cigarette or tobacco beetle	explanation of environmental factors that affect the lives of warehouse insects.	and short exams, reports discussion
11	5	Theoretical: a1: Traditional methods of pest control  Practical: c1: Leather and cheese crushed grain beetle	Traditional methods of pest control  Leather and cheese crushed grain beetle	warehouses, detailed explanation of environmental factors that affect the lives of warehouse insects.	Quarterly and short exams, reports discussion
12	5	Theoretical: d3: Modern methods of control include Practical: c1: The difference between true weevil and grain weevil (rice weevil , grain weevil)	Modern methods of control include , use to ozone gas and extras plants  The difference between true weevil and grain weevil (rice weevil , grain weevil)	warehouses, detailed explanation of environmental factors that affect the lives of warehouse insects.	Quarterly and short exams, reports discussion
13	5	Theoretical: a1: Chemical control: pesticides – fumes Practical: c1: Dry fruit beetle , legume beetle	Chemical control: pesticides – fumes  Dry fruit beetle , legume beetle	warehouses, detailed explanation of environmental factors that affect the lives of warehouse insects.	Quarterly and short exams, reports discussion
14	5	Theoretical: a1: An overview of non-insect pests that infect warehouses  Practical: c1: Arachnids (dream flour)	An overview of non-insect pests that infect warehouses  Arachnids (dream flour)	warehouses, detailed explanation of environmental factors that affect the lives of warehouse insects.	Quarterly and short exams, reports discussion
15	5	Theoretical: d3: A brief idea about rodents and ways to combat them Practical: c1: Rodents and their harm	A brief idea about rodents and ways to combat them  Rodents and their harm	warehouses, detailed explanation of environmental factors that affect the lives of warehouse insects.	Quarterly and short exams, reports discussion




## 11. Course Evaluation

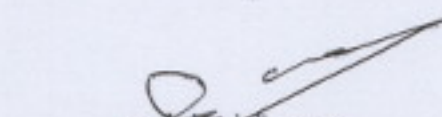
	Evaluation methods	Evaluation date (one week)	Grade	Relative weight %
1	1 final theoretical report + theoretical practical experience reports	My theory is week 15 My work week is 1- 15	7Theoretical + 6Practical	13 %
2	Short test 1	Week 3	4Theoretical + 2Practical	6%
3	Midterm test (theoretical and practical)	Week 9	10 theoretical +5 practical	15%
4	Short test 2	Week 12	4 Theoretical + 2Practical	6 %
5	Final practical test	Practical exams week	20	20%
6	Final theoretical test	The week of theoretical exams	40	40%
	the total		100	100%

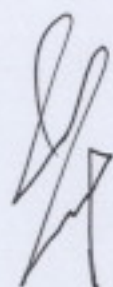
## 12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	
Main references (sources)	Book of warehouse insects and methods of combating them, Prof. Dr. Riyad Al-Iraqi. 2010 A book on warehouse insects, their importance and ways to combat them Mr. Dr. Iyad Ismail 2014
Recommended books and references (scientific journals, reports...)	Review of Stored Product Pests
Electronic References, Websites	<a href="https://agr.tanta.edu.eg">https:// agr.tanta.edu.eg</a> <a href="https://coagri.uobaghdad.edu.iq">https:// coagri.uobaghdad.edu.iq</a>

  
مدرس المادة العملي:

م.م. اخلاص زياد محمد

  
مدرس المادة النظرية:  
أ.د. عماد قاسم محمد

  
رئيس القسم :  
أ.م.د. طه محمد تقي

  
رئيس اللجنة العلمية:



الاستاذ المساعد الدكتور  
طه محمد تقي محمد