Suggested research topics

Winter semester of the academic year 2019/2020

Course name in Arabic:	**الزراعات المائية المتكاملة**
Course name in English:	**Integrated aquaculture**
Professor Dr.:	**Mohamed M. Abdel-Rahim**
Level:	**Third**
Department:	**Aquaculture**

No.	Research title	Research items
1	The Potential Negative Environmental Impact of Traditional Aquaculture, and How to solve through the ideas of integration?	1- Negative Impacts 2- Biological Pollution 3- Chemical Pollution 4- Habitat Modification: 5- Organic Pollution & Eutrophication 6- Integrated systems
2	Hydroponics: the modern technology of plant agriculture	1- Scientific basic 2- Designs 3- Requirements 4- Plant species 5- Operation 6- Production 7- Economics
3	Aquaponics: the modern technology of fish/plant farming	1- Scientific basic 2- Mode of action 3- Designs 4- fish/plant species 5- Operation 6- Production 7- Economics 8- future ideas
4	A commercial project of aquaponics	1- Introduction 2- Area of the project 3- Design 4- Requirments 5- Calculations 6- Operation 7- Expected economics
5	Rice/Fish Integrated Farm	1- Scientific basic 2- Designs 3- Requirments 4- Species of aquatic animals 5- Operation 6- Production 7- Expected economics
6	Fish/Poultry Integrated Farm.	1- Scientific basic 2- Designs 3- Requirments 4- Species of aquatic animals 5- Species of poultry 6- Operation 7- Production 8- Expected economics
7	Fish/Duck Integrated Farm	1- Scientific basic 2- Designs 3- Requirments 4- Species of aquatic animals 5- Species of duck 6- Operation 7- Production 8- Expected economics

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No.	Research title	Research items
8	El-Kram Integrated Fish Farm	1- Scientific basic 2- Design details 3- Operation 4- Production 1- Expected economics
9	Integrated multi-trophic aquaculture (IMTA): a sustainable technology for the future generation	2- Scientific basic 3- Designs 4- Requirments 5- Species of aquatic animals 6- Operation 7- Production
10	Fish/frog Integrated Farm	1- Scientific basic 2- Designs 3- Requirements 4- Methods of operations 5- Species of frog 6- Species of aquatic organisms 7- Production 8- Expected economics.
11	Fish/softshell Turtle Integrated Farm	1- Scientific basic 2- Designs 3- Requirements 4- Methods of operations 5- Species of fish 6- Production 7- Expected economics
12	Tilapia/shrimp Integrated Farm	1- Scientific basics 2- Requirements 3- Species of shrimp 4- Methods of operations 5- Production 6- Expected economics
13	How to convert tilapia fish farm to integrated farm?	1- Negative impacts of monoculture 2- Scientific basics of integration 3- Species of the additional aquatic animals 4- Mode of action for each species 5- Water savings 6- Production 7- Expected Economics

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