



## **Suggested research topics**

## Winter semester of the academic year 2019/2020

معالجة المياه ومياه الصرف :Course name in Arabic

**Course name in English: Water and Wastewater treatment** 

Professor Dr.: Kamel Rizq

Level: Three ...

**Department:** Fish Processing and Biotechnology





No.	<b>Research title</b>	<b>Research items</b>
1	Write on sampling and analysis techniques	
	during water collection?	
2	Harmful heavy metals and their effects on	
	the surrounded environment?	
3	Write on atomic absorption spectroscopy	
	in the detection of heavy metals?	
	Write on atomic Inductive Coupled	
4	Plasma-Mass Spectroscopy (ICP-MS in the	
	detection of heavy metals?	
	How could you determine of Vanadium in	
5	lubricating oil and Lead in contaminated	
	soil using atomic absorption spectroscopy	
6	Write on Persistent Organic Pollutants?	
7	What are the conventional techniques used	
	for the treatment of wastewater?	
	What is the effect of climate change and	
8	the fate of Persistent Organic Pollutants in	
	the environment?	

## **Course Instructor:**

Name: D. Kamel Rizq Shoueir

Signature: D. Kamel Rizq Shoueir





No.	<b>Research title</b>	<b>Research items</b>
9	Write on the versatile adsorbents for the removal of heavy metal ions from water?	
10	Role of nanomaterials as nano adsorbents	
11	Write the two common adsorption kinetics that explains the interaction between adsorbent and adsorbate?	
12	Write the two common adsorption isotherms models?	
13	Write of the fluid mechanics key facts	
14	Heavy metals risks on human and soil	
15	Heavy metals accumulation hazardous in fish and plants	

## **Course Instructor:**

Name: D. Kamel Rizq Shoueir Signature D. Kamel Rizq Shoueir