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**THE IMPACT RANKING**

# **SDG6**

**CLEAN WATER AND SANITATION**

## **6 CLEAN WATER AND SANITATION**



## SDG 6 clean water and sanitation

Access to water and sanitation are basic human rights and are critical sustainable development challenges. Pharos university is involved in the following activities

### 6.1. University management Plan for water conservation

Pharos University is implementing a plan for the re-use of water in its premises.

- (a) wastewater and as per the records of the university administration, wastewater from washing rooms, kitchens, and laboratories are collected and channeled to a specialized company to manage the recycling process and get rid of toxic material in a safe way. The university has signed a contracts with specialized companied for collection and treatment of wastewater in a sustainable way. This company was selected based on its environmental portfolio that ensures that water is reused in an environment friendly way. The company responsible to treating water for reuse according to the quality of output, mainly in irrigating street trees in the neighborhood.
- (b) Reuse of water: The university manage a process for rainwater collection and fresh water disposed from air conditions. Both water sources are channeled and sored in a 15m3 water tank for reuse in irrigation of the of landscape, and the play green ground that reach an area of about 35200. This green area has increased since last year where it was 21000m2. With this amount of water, the green areas in Pharos University is expected to increase every year
- (c) Drinking water: Drinking water quality is maintained at the university premises by installing 3 -level filters at the source inlet to purify drinking water before use by university members. The amount of freshwater reuse in the campus has decreased due to the above practices. The current average amount is about 2779 m3 per month.

### 6.2. Activities

On Tuesday 26 November 2019, the faculty of Engineering organized a symposium on “Safe disposal of sewage water and its impact and environmental protection”. The symposium addressed the challenges facing Alexandria governorate and the stages of safe disposal of sewage water and its sources, whether from agricultural drainage, industrial drainage, or human drainage. The symposium also addressed the modern methods currently used to reuse that water and potential extracts such as fertilizers and road asphalt

### 6.3. Courses addressing SDG 6

Faculty	Course name	Course code	SDG-relevancy	Topic
Applied Health Sciences Technology	Environmental Health	MGEH-101	6	Hygiene for Clean water and sanitation
Pharmacy	Instrumental Analysis	(PCD 203)	6	methods of water purification, the detection of impurities

Engineering	water and wastewater	ES 401	6	The course introduces an overview of Water Supply Introduction and Definitions, important Fields of Environmental Engineering, Environmental system, Waste cycles
Engineering	Water treatment	EP 328	6	This course introduces the students to Water chemical analysis, water treatment for different uses, Equipment design calculations

#### 6.4. Publications

<b>Removal of Zinc from Aqueous Solution Using Activated Oil Shale</b>
<b>Ehssan Nassef, Yehia Eltaweel</b>
Alexandria university
<b>Synthesized silver carbon nanotubes and zinc oxide nanoparticles and their ability to remove methylene blue dye</b>
<b>(2019) Journal of Nano Research, 56, pp. 1-16. Cited 3 times.</b>
<b>El-Khatib, A.M., Yousef, N.S., Ghatass, Z.F., Badawi, M.S., Mohamed, M.M., Elkhatib, M.</b>
Beirut university, Alexandria university
<b>Removal of Zinc from Aqueous Solution Using Activated Oil Shale</b>
<b>Ehssan Nassef, Yehia Eltaweel</b>
Alexandria university