

GLOBAL SCHOLARS ACHIEVING CAREER SUCCESS (GSACS) Spring Conference: May 15, 2023

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Project Overview

This project brings college students in Jordan and New York City together to explore the issue of water pollution and the quality of drinking water in different neighborhoods/regions in Jordan and New York City by analyzing water samples in the laboratory to determine the type of challenges that facing both countries in water desalination and proposing solutions to solve these challenges and mitigate them.

Overall Goal and main objectives

Overall Goal: Is studying one of the most important goals of sustainable development clean water and sanitation

Main Objectives:

1. Increase student's knowledge about water related issues
2. To build a piece of knowledge about the cultural differences between Jordan and NYC
3. Know the differences in water quality within Jordan and NYC

Phases of implementation/Main activities

Ice-Breaker

Comparative Analysis Assignment

Virtual meeting

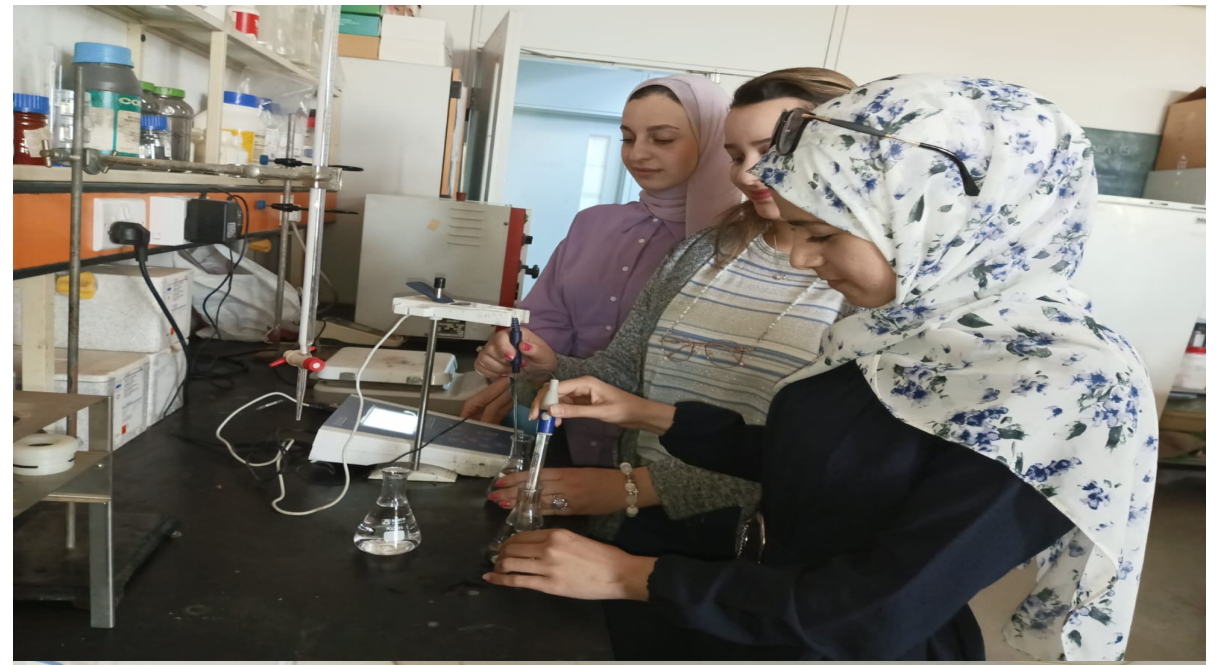
Water samples testing

Phases of implementation/Main activities

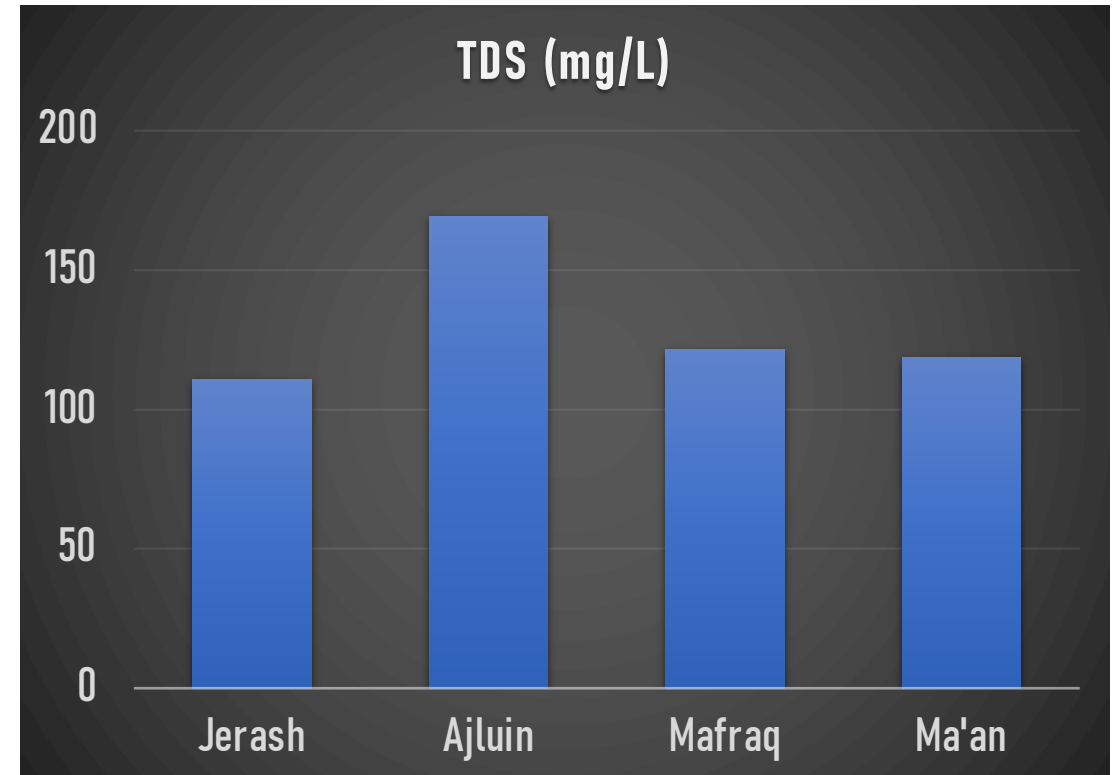
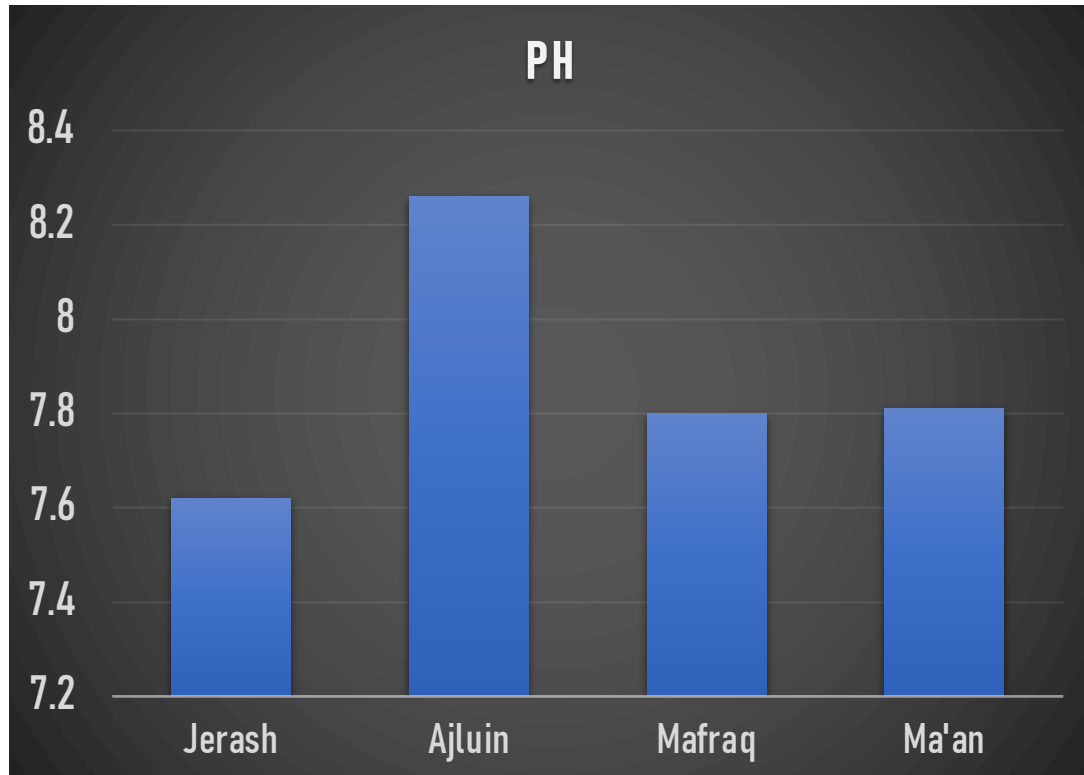
- Week #1: Career awareness presentation, cultural background of international institution
- Week #2: Icebreakers and First introductions
- Week # 3: Literature review and target identification
- Week # 4 &5 : Comparative analysis domestic and international communication
- Week 6-8: Community based Experiential learning project.
- Today : Student conference , Career Workshop

Water Quality Testing In Jordan

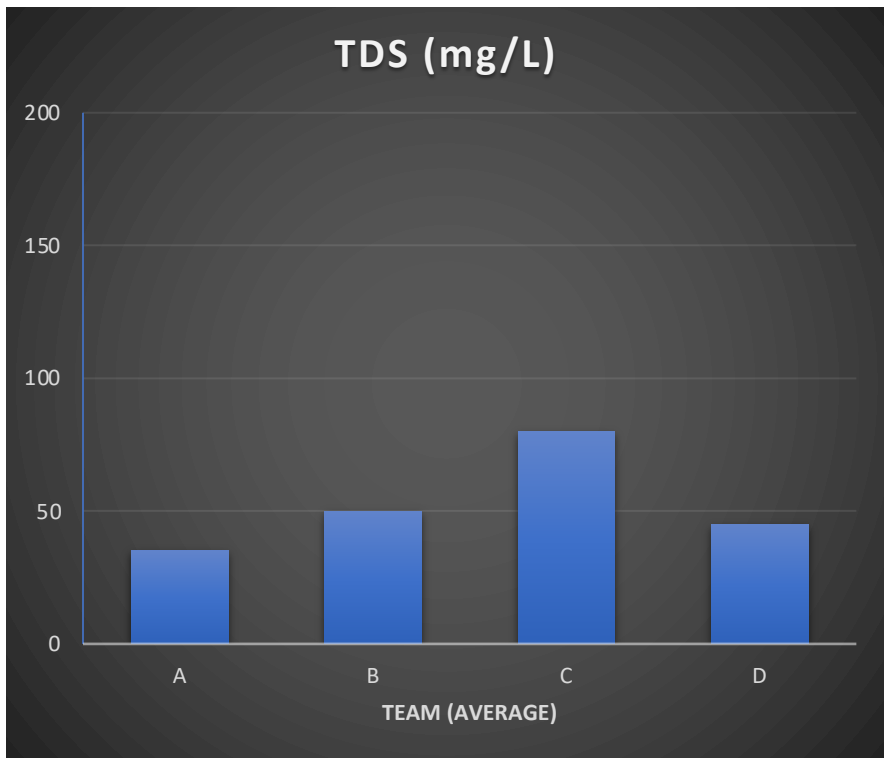
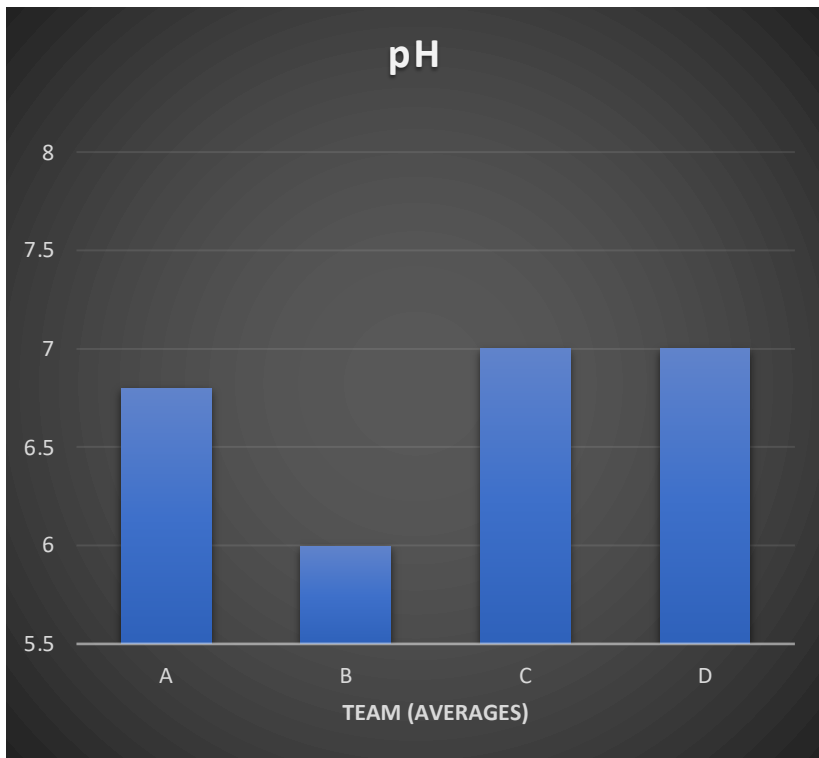
For testing water quality in Jordan, experiments were conducted in the lab for water samples to determine the content of heavy metals by the means of the Atomic Absorption Spectrophotometer



PH and TDS - Jordan



PH and TDS -NEW YORK CITY



Preliminary Results



- ❑ Overall, Introductory meetings between students yielded insights into the differences in perspectives and values in the culture....i.e.
 - scheduling meetings around Ramadan, and
 - greater need to purify all water for household use in Jordan, and
 - different traditions and choices in dress, communication styles.

- ❑ Water quality testing focused on measurement of
 - pH,
 - Total dissolved solids (TDS),
 - Heavy metals e.g Pb

- ❑ Total dissolved solids (TDS) generally 40-50% higher in Jordan drinking water compared to NYC drinking water.

- ❑ pH slightly more acidic, on average, in NYC compared to Jordan

Preliminary Results



- ❑ Increased public awareness campaigns on the importance of water conservation.
- ❑ The sources of drinking water are different, requiring different and possibly much more expensive technology to gain potable water in Jordan compared to in NYC .
- ❑ Purification of heavy metals and dissolved solids most likely more expensive in Jordan due to underground water source .
- ❑ pH appears to have direct relationship to amount of TDS (dissolved solids).

Suggested Solutions



Concentrate on the research and development of water quality technologies that are **PARTICULAR TO THE** geographic and political context and challenges in each country



Giving lectures in universities and schools that aims at increasing the awareness of availability of water saving subject and the importance of using clean water.



Global  Scholars

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Some Student Reflection Excerpts

- Already, we see a vast difference in our access to water. It makes me aware of how much I take my access to clean drinkable water for granted.
- I also learned more about the culture in Jordan and the holidays they celebrate. In the middle of our investigation, we had to choose when to contact our Jordan peers as they were celebrating Ramadan and couldn't communicate freely.....I learned that there is fasting and praying time during Ramadan, all taken with the utmost respect and due diligence..... This makes me look at how I celebrate holidays, what is important to me, and how it is a part of my culture. -

--B.D.

Student Reflection—gender norms, Western influence....

- I saw that the guys spoke the majority of the time, while the women hardly ever did. I wondered if it was because they weren't accustomed to conversing with people from other countries and cultures... many of the women remained silent, and when they did speak, it was usually in a sedate manner with occasional facial expressions....However, the guys were very at ease and chatty.
- I was a little surprised by how well they spoke English because I wasn't sure if they did, and it made me realize how influential our western society is. ---R.E.

Student Reflection—cultural empathy..scarcity and care of water as resource....

- I have always been interested in Palestine and their freedom from occupation so I let that be the opening topic of our discussion. I knew most of them would be supportive which is why it was a great ice breaker. It allowed them to be comfortable with me and share other questions about their daily routine with water.
- When talking to my international teammates I had to change the way i speak in a way more fitting for them to understand, i didn't mind as it was the least i could do.
- They told us that every house has their own filter so for the most part the water is safe and that it comes from the grounds instead of ours that come from mountains. They also told us that it isn't a safe idea to shower too long with the water as that water supply doesn't have the same filter as the kitchen faucet. That it could potentially damage your hair and skin.

----N. N.

Student Reflection—global perspectives...communication and appreciation...

- It's changed my perspective on the world by making me aware that not everyone has access to the finer things in life even though in America, we take them for granted and waste a lot of resources. While other third world countries use them to its full potential.
- The most challenging thing was getting over being shy and to meet someone new to understand their lifestyle. Because you must [be] open to be able to understand something you don't know. I overcame this challenge by trying it out and taking it one step at a time.
- I felt excited to test water since I have been curious about the water quality in out NYC tap water and to see why bottled water is better but still bad in a way. Others also felt good about doing this project. The outcomes were amazing, and I wish I could do more experiments like this around the world with other students.

--J. R.