

COLLEGE OF  
**HEALTH  
SCIENCES**



## ENVIRONMENTAL HEALTH SCIENCE DEPARTMENT

### Environmental Health Science Laboratories

| Lab Name                                | Location | Person in Charge | Programs Served   | Courses Served  |
|---|----------|------------------|---|---|
| Environmental & Occupational Health Lab | W12-005  | Badria Ahmed     | <ul style="list-style-type: none"> <li>- Environmental Health Science Dept.</li> <li>- Clinical Nutrition &amp; Dietetics Dept.</li> </ul>                                | <ul style="list-style-type: none"> <li>- Environmental &amp; Occupational Hygiene Measurement</li> <li>- Water and Wastewater Sanitation</li> <li>- Practical Food Analysis</li> <li>- Graduate Projects</li> </ul>                                   |
| Water Analysis Lab                      | W12-005  | Badria Ahmed     | <ul style="list-style-type: none"> <li>- Environmental Health Science Dept.</li> <li>- Clinical Nutrition &amp; Dietetics Dept.</li> </ul>                                | <ul style="list-style-type: none"> <li>- Environmental &amp; Occupational Hygiene Measurement</li> <li>- Water and Wastewater Sanitation</li> <li>- Practical Food Analysis</li> <li>- Graduate Projects</li> </ul>                                   |
| Environmental Microbiology Lab          | M12-130  | Badria Ahmed     | <ul style="list-style-type: none"> <li>- Environmental Health Science Dept.</li> <li>- Clinical Nutrition &amp; Dietetics Dept.</li> <li>- College of Pharmacy</li> </ul> | <ul style="list-style-type: none"> <li>- Water and Wastewater Sanitation</li> <li>- Food Safety and Quality</li> <li>- Environmental Microbiology</li> <li>- Practical Food Analysis</li> <li>- Graduate Projects</li> <li>- Pharmacy Labs</li> </ul> |

### Environmental Health Science Lab Staff

| # | Name         | Ext.      | Email                  |
|---|--------------|-----------|------------------------|
| 1 | Badria Ahmed | 065050476 | bebrahim@sharjah.ac.ae |

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## ENVIRONMENTAL AND OCCUPATIONAL HEALTH LABORATORY



| Location | Lab Staff in Charge | Contacts  |
|----------|---------------------|-----------|
| W12-005  | Badria Ahmed        | 065052476 |

### INTRODUCTION

This Laboratory enables students to learn the operating principles, advantages and limitations of various types of equipment used to evaluate environmental and occupational hazards.

### EQUIPMENT & INSTRUMENTS

- Sound Level Meter
- Logging Noise Dose Meter
- Integrating Dose Meters
- Sound Survey Meter
- Dust Scan Scout Model 3020 Monitor
- Global Thermometer Digital Thermo-Anemometer
- Digital Thermo-Hygrometer
- Area Heat Stress Monitor Hs-32
- Gas Detector (OMNI – 4000)
- Luminous Intensity Meter (545)
- Spirometer Vitalograph 2120
- Radiation Meter Tracerco T401
- Personal Air Sampler APEX
- Personal Air Monitor AFC123
- Miran Sapphire Analyzer
- TWL-1S Heat Stress Monitor
- Extech HT200 Heat Stress WBGT Meter
- PCXR8 Universal Sample Pump

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## **EXPERIMENTS**

All experiments are conducted according to the standard methods for environmental and occupational hazards sampling, analysis and measurements.

## **TESTS & SERVICES**

- Noise Assessment
- Environmental Dust Assessment
- Thermal Environment Assessment
- Environmental Gas Assessment
- Environmental Light Assessment
- Pulmonary Function Indices Assessment
- Radiation Detection
- Air Sampling and Analysis

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## WATER ANALYSIS LABORATORY



| Location | Lab Staff in Charge | Contacts  |
|----------|---------------------|-----------|
| W12-005  | Badria Ahmed        | 065052476 |

### INTRODUCTION

This Laboratory enables students to conduct all routine analysis for drinking water, surface waters, recreational waters, municipal wastewater and industrial/agricultural waters.

### EQUIPMENT & INSTRUMENTS

- Hach DR 2800 Spectrometers
- Digital Titration systems
- Thermo-Orion 4 Star Meters
- Ion Selective Electrode for Measurements of Ammonia, Nitrates, Fluorides
- Dissolved Oxygen Meter Equipped with BOD Measurement Kit
- Oxidation Reduction Potential Meter
- Portable Residual Chlorine Meter
- PH Meter
- Turbidity meter
- Membrane filtration microbial testing system
- Ovens
- Analytical/benchtop balances
- Nitrate Meter
- Ammonia Meter
- Conductivity Meter
- Vacuum Suction Filter Filtration Kit
- Jar tester

### EXPERIMENTS

All experiments are conducted according to the standard methods for examination of water and wastewater and USEPA standard methods.

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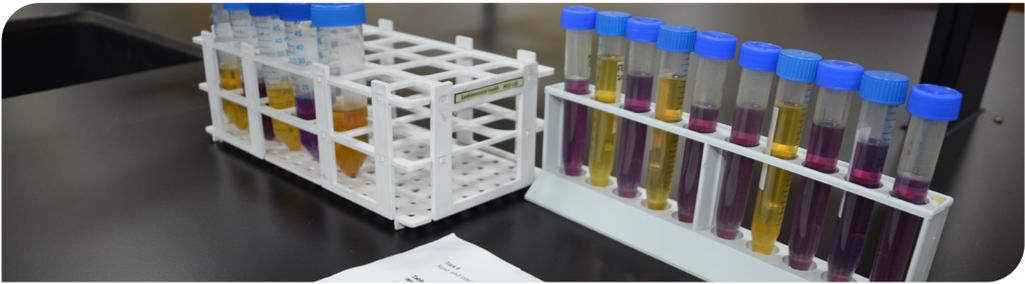
## TESTS & SERVICES

Measurements of the Following Parameters:

- PH and Turbidity
- Color and Conductivity
- Alkalinity, Chlorides and Fluorides
- Hardness, Nitrate, Nitrite, Ammonia, Iron and Manganese, Dissolved Oxygen, BOD, COD
- Solids, suspended solids, dissolved solids, volatile and fixed solids
- Microbiological assessment of water

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## ENVIRONMENTAL MICROBIOLOGY LABORATORY



| Location | Lab Staff in Charge | Contacts  |
|----------|---------------------|-----------|
| M12-130  | Badria Ahmed        | 065052476 |

### INTRODUCTION

The Environmental Microbiology Laboratory exposes students to actual field settings through applying the standard methods for aseptic techniques for microbiological sample collection, preservation and examination. The Environmental Microbiology Laboratory offers the opportunity for students to identify, enumerate and isolate different microorganisms relevant to the environmental health field (e.g. water, wastewater, indoor and outdoor air samples)

### EQUIPMENT & INSTRUMENTS

- Autoclaves
- Anaerobic Jars
- Centrifuges
- Refrigerators
- Freezers
- Oven
- Water Bath
- Balance
- Incubator
- Microscopes
- Colony Counters
- Stomacher
- PH Meter
- Media, Chemicals, Diagnostic Kits, APE-20 and Reagents
- Air Sampler “Microflow”
- Biosafety Cabinet Class II

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## **EXPERIMENTS**

- All experiments are conducted according to the standard methods for air, water, and food examination

## **TESTS & SERVICES**

- Heterotrophic Plate Count
- MPN of Total Coliforms
- MPN of Feacal Coliforms
- MPN of Enterococci
- Microorganisms in Food Samples
- Indoor and Outdoor Microbial Air Count
- Microbiological Survey of Food Contact Surfaces
- Intrinsic and Extrinsic Parameters of Food