



**COURSE OVERVIEW LE0063**

**Aseptic Method & Techniques: ASTM E2783-11, 12 & 13**

**Course Title**

Aseptic Method & Techniques: ASTM E2783-11, 12 & 13

**Course Date/Venue**

August 12-16, 2024/Al Reem 1, Grand Millennium Al Wahda Hotel, Abu Dhabi, UAE

**Course Reference**

LE0063

**Course Duration/Credits**

Five days/3.0 CEUs/30 PDHs



**Course Description**



***This practical and highly-interactive course includes real-life case studies and exercises where participants will be engaged in a series of interactive small groups and class workshops.***

This course is designed to provide participants with a detailed and up-to-date overview of Aseptic Method & Techniques: ASTM E2783-11, 12 & 13. It covers the basic principles of aseptic methods including the differences and updates of ASTM E2783-11, E2783-12, and E2783-13; the types of microbial contaminants and the methods to control and prevent contamination; the laboratory safety procedures and protocols, sterilization methods and setting up an aseptic work area; the aseptic procedures and sterility testing and interpretation; the proper use of PPE in aseptic environments; collecting and handling of water samples using aseptic techniques to avoid cross-contamination during sampling; and the advanced sterilization methods.



During this interactive course, participants will learn the monitoring of environmental conditions; the control measures to maintain aseptic conditions; the quality control procedure, documentation, record-keeping validation and verification protocols; the relevant regulatory standards and compliance; the aseptic methods in water purification and treatment; the aseptic methods in electricity generation including biofilm control and management; the proper sampling and analysis of water and electrical equipment; the aseptic maintenance practice, troubleshooting and problem solving; and the aseptic protocols and the emerging technologies and advancements in aseptic methods.



## Course Objectives

Upon the successful completion of this course, each participant will be able to: -

- Apply and gain an in-depth knowledge on aseptic method and techniques in accordance with ASTM E2783-11, 12 & 13 standards
- Discuss and the basic principles of aseptic methods and the differences and updates of ASTM E2783-11, E2783-12, and E2783-13
- Recognize the types of microbial contaminants and the methods to control and prevent contamination
- Carryout laboratory safety procedures and protocols, sterilization methods and setting up an aseptic work area
- Employ aseptic procedures and sterility testing and interpretation
- Demonstrate the proper use of PPE in aseptic environments and ensure compliance with safety standards
- Collect and handle water samples using septic techniques to avoid cross-contamination during sampling
- Carryout advanced sterilization methods and discuss the use of UV sterilization and other technology
- Monitor environmental conditions and apply control measures to maintain aseptic conditions
- Apply quality control procedure, documentation and record-keeping including validation and verification protocols
- Discuss the relevant regulatory standards and compliance and apply aseptic methods in water purification and treatment
- Carryout aseptic methods in electricity generation including biofilm control and management
- Implement proper sampling and analysis of water and electrical equipment, aseptic maintenance practice and troubleshooting and problem solving
- Develop aseptic protocols and discuss the emerging technologies and advancements in aseptic methods

## Exclusive Smart Training Kit - H-STK®



Participants of this course will receive the exclusive “Haward Smart Training Kit” (H-STK®). The H-STK® consists of a comprehensive set of technical content which includes **electronic version** of the course materials, sample video clips of the instructor’s actual lectures & practical sessions during the course conveniently saved in a **Tablet PC**.

## Who Should Attend


This course provides an overview of all significant aspects and considerations of aseptic method & techniques: ASTM E2783-11, 12 & 13 for laboratory technicians and scientists, quality assurance and quality control personnel, manufacturing and production staff, regulatory and compliance officers, and other technical staff

### Course Certificate(s)

Internationally recognized certificates will be issued to all participants of the course who completed a minimum of 80% of the total tuition hours.

### Certificate Accreditations


Certificates are accredited by the following international accreditation organizations: -

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The International Accreditors for Continuing Education and Training (IACET - USA)

Haward Technology is an Authorized Training Provider by the International Accreditors for Continuing Education and Training (IACET), 2201 Cooperative Way, Suite 600, Herndon, VA 20171, USA. In obtaining this authority, Haward Technology has demonstrated that it complies with the **ANSI/IACET 2018-1 Standard** which is widely recognized as the standard of good practice internationally. As a result of our Authorized Provider membership status, Haward Technology is authorized to offer IACET CEUs for its programs that qualify under the **ANSI/IACET 2018-1 Standard**.

Haward Technology's courses meet the professional certification and continuing education requirements for participants seeking **Continuing Education Units (CEUs)** in accordance with the rules & regulations of the International Accreditors for Continuing Education & Training (IACET). IACET is an international authority that evaluates programs according to strict, research-based criteria and guidelines. The CEU is an internationally accepted uniform unit of measurement in qualified courses of continuing education.

Haward Technology Middle East will award **3.0 CEUs** (Continuing Education Units) or **30 PDHs** (Professional Development Hours) for participants who completed the total tuition hours of this program. One CEU is equivalent to ten Professional Development Hours (PDHs) or ten contact hours of the participation in and completion of Haward Technology programs. A permanent record of a participant's involvement and awarding of CEU will be maintained by Haward Technology. Haward Technology will provide a copy of the participant's CEU and PDH Transcript of Records upon request.

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British Accreditation Council (BAC)

Haward Technology is accredited by the **British Accreditation Council for Independent Further and Higher Education** as an **International Centre**. BAC is the British accrediting body responsible for setting standards within independent further and higher education sector in the UK and overseas. As a BAC-accredited international centre, Haward Technology meets all of the international higher education criteria and standards set by BAC.

### Accommodation

Accommodation is not included in the course fees. However, any accommodation required can be arranged at the time of booking.

### Course Instructor(s)

This course will be conducted by the following instructor(s). However, we have the right to change the course instructor(s) prior to the course date and inform participants accordingly:



**Dr. Yousef Al-Mashni, PhD, MSc, BSc, is an International Expert in Analytical Laboratory with over 35 years of extensive experience. He is an authority in Aseptic Method & Techniques: ASTM E2783-11, 12 & 13, Aseptic Techniques, Laboratory Equipment, Laboratory Quality Management Systems (ISO 17025 and ISO 15189), Lab Safety & Health, Good Laboratory Practice (GLP) and Safety Procedure in Laboratories. His wide expertise also covers Water Analysis & Reporting, Water Sampling & Testing, Water Analyzer, Medical Laboratory Auditing, ISO 15489, Infection Control, Internal Quality Control for Microbiologists, Analytical Techniques, Biochemical, Hematological, Parasitological, Biochemical, Microbiological & Serological Analysis of Clinical Specimens, Helminth Ova & Salmonella in Waste Water & Sludge, Microbiological Aspects & Analysis of Wastewater, Microbiology of Wetlands, Microbiological Indoor Air Quality, Entrococcus, Pseudomonas & Aeromonas, Sulfate Reducing Bacteria, Fluorescence Microscopy, Planktology of Ambient Environment, Oral, Medical & Diagnostic Microbiology and Oral & Dental Hygiene. Further, he is also well-versed in the areas of Food Hygiene and HACCP, Food Safety, Food Poisoning, First Aid & CPR and Fire Safety. He is currently the Deputy Principal & Chief Technical Instructor of UNRWA wherein he is responsible in developing and managing operations at the college/centre including building workshops and laboratories capacity, curriculum development and introducing new courses.**

During his long career life, Dr. Yousef worked for many international companies handling key positions such as ICDL Centre **Manager, Deputy Principal, Chief Technical Instructor, Acting Principal, Laboratory Supervisor, Technical Instructor, Technical & Vocational Instructor, Senior Medical Laboratory Technician and Medical Laboratory Technician.**

Dr. Yousef has a **PhD degree in Natural Health Sciences from the University of Florida (USA), Master degree in Clinical Microbiology and Bachelor degree with Honours in Microbiology.** Further, he has **Diploma in Vocational Education (UNRWA & UNESCO)** and received several **certifications** like **ICDL** and **Training of Trainers (TOT) in Cambridge University (England).** He is a **Certified Internal Verifier/Assessor/Trainer** by the **Institute of Leadership & Management (ILM), a Certified Instructor/Trainer** and an active member of **Jordan Medical Laboratories Society, Technical Accreditation Committee of Medical Laboratories (Jordan Institution & Metrology)** and the **Technical Accreditation Committee for Granting ISO 15189 Certificate.** Furthermore, he has also published numerous technical papers and books including **Medical & Diagnostic Microbiology, Practical Competencies in Medical Laboratory Technology, Safety in Medical Laboratory Science and Quality Control in Medical Laboratory Science** just to name a few.

### Course Fee

**US\$ 5,500** per Delegate + **VAT.** This rate includes H-STK® (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.



### Course Program

The following program is planned for this course. However, the course instructor(s) may modify this program before or during the workshop for technical reasons with no prior notice to participants. Nevertheless, the course objectives will always be met:

#### **Day 1: Monday, 12<sup>th</sup> of August 2024**

0730 – 0800	Registration & Coffee
0800 – 0815	Welcome & Introduction
0815 – 0830	<b>PRE-TEST</b>
0830 – 0930	<b>Fundamentals of Aseptic Techniques</b> Basic Principles of Aseptic Methods • History & Development of Aseptic Techniques
0930 – 0945	Break
0945 – 1100	<b>Understanding ASTM Standards</b> Overview of ASTM E2783-11, E2783-12, & E2783-13 • Key Differences & Updates in Each Version
1100 – 1230	<b>Microbial Contamination &amp; Control</b> Types of Microbial Contaminants in Water & Electricity Industries • Methods to Control & Prevent Contamination
1230 – 1245	Break
1245 – 1330	<b>Laboratory Safety &amp; Protocols</b> Safety Procedures in Aseptic Environments • Proper Laboratory Attire & Equipment Handling
1330 – 1420	<b>Sterilization Techniques</b> Overview of Sterilization Methods (Heat, Chemical, Filtration) • Selecting Appropriate Sterilization Techniques for Different Scenarios
1420 – 1430	<b>Recap</b> Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow
1430	Lunch & End of Day One

#### **Day 2: Tuesday, 13<sup>th</sup> of August 2024**

0730 – 0830	<b>Setting Up an Aseptic Work Area</b> Preparing & Maintaining a Clean Work Environment • Proper Layout & Design of Aseptic Workspaces
0830 – 0930	<b>Aseptic Technique Procedures</b> Step-By-Step Guide to Common Aseptic Procedures • Hands-On Practice of Aseptic Transfers & Manipulations
0930 – 0945	Break
0945 – 1100	<b>Sterility Testing Methods</b> Techniques for Sterility Testing • Interpreting Sterility Test Results
1100 – 1230	<b>Use of Personal Protective Equipment (PPE)</b> Types & Proper Use of PPE in Aseptic Environments • Ensuring Compliance with Safety Standards
1230 – 1245	Break
1245 – 1330	<b>Aseptic Handling of Water Samples</b> Collection & Handling of Water Samples Using Aseptic Techniques • Avoiding Cross-Contamination During Sampling



1330 – 1420	<b>Case Studies &amp; Real-World Applications</b> Case Studies of Aseptic Failures & Successes • Discussion on Lessons Learned & Best Practices
1420 – 1430	<b>Recap</b> Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow
1430	Lunch & End of Day Two

**Day 3: Wednesday, 14<sup>th</sup> of August 2024**

0730 – 0830	<b>Advanced Sterilization Techniques</b> In-Depth Look at Advanced Sterilization Methods • Use of Autoclaves, UV Sterilization, & Other Technologies
0830 – 0930	<b>Environmental Monitoring &amp; Control</b> Techniques for Monitoring Environmental Conditions • Control Measures to Maintain Aseptic Conditions
0930 – 0945	Break
0945 – 1100	<b>Quality Control Procedures</b> Quality Control Checks & Balances • Ensuring Consistency & Reliability in Aseptic Processes
1100 – 1230	<b>Documentation &amp; Record-Keeping</b> Importance of Accurate Documentation • Best Practices for Record-Keeping in Aseptic Operations
1230 - 1245	Break
1245 - 1330	<b>Validation &amp; Verification of Aseptic Techniques</b> Methods for Validating Aseptic Procedures • Verification Protocols & Criteria
1330 – 1420	<b>Regulatory Requirements &amp; Compliance</b> Overview of Relevant Regulatory Standards & Guidelines • Ensuring Compliance with Local & International Regulations
1420 – 1430	<b>Recap</b> Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow
1430	Lunch & End of Day Three

**Day 4: Thursday, 15<sup>th</sup> of August 2024**

0730 – 0830	<b>Aseptic Techniques in Water Treatment</b> Application of Aseptic Methods in Water Purification & Treatment • Preventing Contamination in Water Distribution Systems
0830 – 0930	<b>Aseptic Methods in Electricity Generation</b> Role of Aseptic Techniques in Electricity Generation & Distribution • Ensuring Clean & Safe Working Environments in Power Plants
0930 – 0945	Break
0945 – 1100	<b>Biofilm Control &amp; Management</b> Understanding Biofilms & Their Impact • Strategies for Biofilm Prevention & Control
1100 – 1230	<b>Sampling &amp; Analysis of Water &amp; Electrical Equipment</b> Techniques for Aseptic Sampling of Water & Electrical Components • Analysis & Interpretation of Sample Data
1230 - 1245	Break



1245 - 1330	<b>Aseptic Maintenance Practices</b> Maintenance Procedures for Ensuring Aseptic Conditions • Handling & Storage of Sterile Equipment
1330 - 1420	<b>Troubleshooting &amp; Problem Solving</b> Common Challenges in Aseptic Environments • Practical Solutions & Troubleshooting Techniques
1420 - 1430	<b>Recap</b> Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow
1430	Lunch & End of Day Four

**Day 5: Friday, 16<sup>th</sup> of August 2024**

0730 - 0830	<b>Aseptic Technique Exercises</b> Practical Exercises & Simulations • Real-World Application of Aseptic Techniques
0830 - 0930	<b>Group Projects &amp; Presentations</b> Group Work on Aseptic Technique Projects • Presentations & Peer Review of Projects
0930 - 0945	Break
0945 - 1100	<b>Assessment &amp; Feedback</b> Written & Practical Assessments to Evaluate Understanding • Feedback & Improvement Areas
1100 - 1230	<b>Developing Aseptic Protocols for Your Facility</b> Creating Customized Aseptic Protocols • Implementation Strategies for Your Specific Facility
1230 - 1245	Break
1245 - 1345	<b>Future Trends in Aseptic Techniques</b> Emerging Technologies & Advancements in Aseptic Methods • Future Challenges & Opportunities
1345 - 1400	<b>Course Conclusion</b> Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Covered During the Course
1400 - 1415	<b>POST-TEST</b>
1415 - 1430	Presentation of Course Certificates
1430	Lunch & End of Course

**Practical Sessions**

This practical and highly-interactive course includes real-life case studies and exercises:-



**Course Coordinator**

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