

COURSE OVERVIEW LE0066
Assessment of Laboratory Competence

Course Title

Assessment of Laboratory Competence

Course Date/Venue

September 01-05, 2024/TBA Meeting Room,
 Novotel Dubai Al Barsha, Sheikh Zayed Road,
 Dubai, UAE

Course Reference

LE0066

Course Duration/Credits

Five days/3.0 CEUs/30 PDHs



Course Description



This practical and highly-interactive course includes real-life case studies 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 Assessment of Laboratory Competence. It covers the laboratory standards and regulations; the roles and responsibilities of a laboratory personnel; the various assessment techniques used to evaluate staff performance and knowledge; and the competency checklists, effective tools for ongoing competence assessment and technical abilities of laboratory staff in performing standard procedure.



Further, the course will also discuss the analytical balances and precision measuring tools; conducting and interpreting quality control checks; the routine calibration and maintenance of laboratory instruments; the importance of document control systems in maintaining laboratory competence; the competence in keeping accurate and thorough laboratory records; the training on regulatory requirements and how to ensure compliance through competent practices; preparing for internal and external audits as a measure of laboratory competence; and the effective communication, teamwork and collaboration and methods to train and develop staff for continual improvement of laboratory competence.



During this interactive course, participants will learn the role of leadership skills in enhancing lab performance and competence; managing conflicts and solving problems efficiently; the methods for continuous assessment and improvement for laboratory competence; the impact of emerging technologies on laboratory competence; and providing constructive feedback, conducting effective performance review and creating a culture that promotes continuous learning and competence.

Course Objectives

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

- Apply and gain an in-depth knowledge on assessment of laboratory competence
- Discuss the fundamentals of laboratory competence, including the laboratory standards and regulations
- Identify the roles and responsibilities of a laboratory-personnel as well as the various assessment techniques used to evaluate staff performance and knowledge
- Develop competency checklists, create effective tools for ongoing competence assessment and evaluate the technical abilities of laboratory staff in performing standard procedures
- Use and maintain analytical balances and precision measuring tools and ensure competence in conducting and interpreting quality control checks
- Employ routine calibration and maintenance of laboratory instruments and discuss the importance of document control systems in maintaining laboratory competence
- Access competence in keeping accurate and thorough laboratory records and develop training on regulatory requirements and how to ensure compliance through competent practices
- Prepare internal and external audits as a measure of laboratory competence
- Employ effective communication, teamwork and collaboration and methods to train and develop staff for continual improvement of laboratory competence
- Define the role of leadership skills in enhancing lab performance and competence
- Manage conflicts and solve problems efficiently and apply methods for continuous assessment and improvement for laboratory competence
- Recognize the impact of emerging technologies on laboratory competence
- Provide constructive feedback, conduct effective performance reviews and create a culture that promotes continuous learning and competence

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 assessment of laboratory competence for laboratory managers, supervisors, engineers, scientists, chemists, analysts 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.

Course Instructor

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



Mr. Paul Patsi, MSc, BSc, is a Senior Analytical Chemist and an International Expert in Water & Waste Water Treatment Technology with over 25 years of extensive experience in Analytical Laboratory and Water & Wastewater Treatment Engineering. His expertise covers Laboratory Assessment, Analytical Chemistry, Microbiological Quality Assurance, Laboratory Competence, Quality Control Procedures, Statistical Analysis, Laboratory Safety, Equipment & Infrastructure Management, Budgeting & Planning of Laboratory Consumables, Business Administration, Personnel Management, Laboratory Management, Chemical Analysis, Laboratory Auditing, Risk Assessment, Microbiological Analysis of Water & Waste Water, Waste Water Treatment Analysis, Water Chemistry, HACCP, ISO 22000, ISO 17025, ISO 9001, Good Manufacturing Practice (GMP), Good Hygiene Practice (GHP) and Good Laboratory Practice (GLP). He is also an expert in microbiological indoor air quality, water biology, food sampling and calibration. He is currently the Head of Industrial Analytical Laboratory of PINDOS wherein he is in-charge of the budgeting, auditing, consumables, suppliers, personnel management, equipment and infrastructure management along with waste water treatment and water/environmental legislation.

During his career life, Mr. Paul has held key positions such as the **Head of Microbiology & Chemical Laboratory, Head of Quality Control, Technical Consultant, Research Projects Specialist, Scientific Consultant, Biologist-Scientific Expert and Biologist** for multi-billion companies like the **European Union, Help LTD, Lake Pamvotis Municipality Company, Hellenic Centre for Marine Research, Cargill and Nestle** just to name a few.

Mr. Paul has a **Master's degree in Food Science and Food Technology** from the **University of Ioannina (Greece)** and a **Bachelor's degree in Biology** from the **Aristotle University of Thessaloniki (Greece)**. He is a **Certified Instructor/Trainer** and a **Member of the Society for Applied Microbiology, Society of Biological Scientist** and the **Global Coalition for Sustained Excellence in Food & Health Protection**.

Training Methodology

All our Courses are including **Hands-on Practical Sessions** using equipment, State-of-the-Art Simulators, Drawings, Case Studies, Videos and Exercises. The courses include the following training methodologies as a percentage of the total tuition hours:-

- 30% Lectures
- 20% Practical Workshops & Work Presentations
- 30% Hands-on Practical Exercises & Case Studies
- 20% Simulators (Hardware & Software) & Videos

In an unlikely event, the course instructor may modify the above training methodology before or during the course for technical reasons.

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.

Accommodation

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

Course Program

The following program is planned for this course. However, the course instructor 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: Sunday, 01st of September 2024

0730 – 0800	Registration & Coffee
0800 – 0815	Welcome & Introduction
0815 – 0830	PRE-TEST
0830 – 0930	Fundamentals of Laboratory Competence: Defining Competence in the Laboratory Context & its Importance for Accuracy & Safety
0930 – 0945	Break
0945 – 1030	Overview of Laboratory Standards & Regulations: Introduction to International Standards such as ISO 17025 & their Requirements for Competence
1030 – 1115	Role of Laboratory Personnel: Differentiating Roles & Responsibilities within the Lab to Understand Scope of Competence
1115 – 1230	Introduction to Competency Assessment Methods: Overview of Various Assessment Techniques Used to Evaluate Staff Performance & Knowledge
1230 – 1245	Break
1245 - 1330	Developing Competency Checklists & Benchmarks: How to Create Effective Tools for Ongoing Competence Assessment
1330 – 1420	Group Activity: Breakout Sessions to Discuss Real-Life Scenarios where Laboratory Competence is Critical
1420 – 1430	Recap
1430	Lunch & End of Day One

Day 2: Monday, 02nd of September 2024

0730 – 0830	Technical Skills Assessment: Evaluating the Technical Abilities of Laboratory Staff in Performing Standard Procedures
0830 – 0930	Analytical Balances & Measurements: Focus on Competence in Using & Maintaining Analytical Balances & Precision Measuring Tools
0930 – 0945	Break
0945 – 1100	Quality Control Procedures: Ensuring Competence in Conducting & Interpreting Quality Control Checks
1100 – 1230	Instrument Calibration & Maintenance: Skills Assessment for Routine Calibration & Maintenance of Laboratory Instruments
1230 – 1245	Break
1245 – 1330	Practical Exercises: Hands-On Activities Focusing on Common Analytical Procedures
1330 – 1420	Discussion: Sharing Experiences of Challenges in Maintaining Analytical Competence
1420 – 1430	Recap
1430	Lunch & End of Day Two

Day 3: Tuesday, 03rd of September 2024

0730 – 0830	Document Management Systems: Understanding the Importance of Document Control Systems in Maintaining Laboratory Competence
0830 – 0930	Record Keeping & Reporting: Assessing Competence in Keeping Accurate & Thorough Laboratory Records
0930 – 0945	Break
0945 – 1100	Compliance with Laboratory Regulations: Training on Regulatory Requirements & how to Ensure Compliance through Competent Practices
1100 – 1230	Audit Preparation & Participation: Preparing for Internal & External Audits as a Measure of Laboratory Competence
1230 – 1245	Break
1245 – 1330	Case Studies: Reviewing Real-World Examples of Documentation Failures & Discussing Preventive Strategies
1330 – 1420	Workshop: Creating a Compliance Checklist for Laboratory Operations
1420 – 1430	Recap
1430	Lunch & End of Day Three

Day 4: Wednesday, 4th of September 2024

0730 – 0830	Communication Skills in the Laboratory: Importance of Effective Communication as Part of Laboratory Competence
0830 – 0930	Teamwork & Collaboration: Assessing & Fostering Effective Teamwork Skills among Laboratory Staff
0930 – 0945	Break
0945 – 1100	Training & Development: Methods to Train & Develop Staff for Continual Improvement of Laboratory Competence
1100 – 1230	Leadership in the Laboratory: Role of Leadership Skills in Enhancing Lab Performance & Competence
1230 – 1245	Break
1245 – 1330	Conflict Resolution & Problem Solving: Techniques for Managing Conflicts & Solving Problems Efficiently
1330 – 1420	Role-Playing Activity: Simulating a Laboratory Meeting to Practice Communication & Problem-Solving Skills
1420 – 1430	Recap
1430	Lunch & End of Day Four

Day 5: Thursday, 5th of September 2024

0730 – 0830	Continuous Improvement Practices: Methods for Continuous Assessment & Improvement of Laboratory Competence
0830 – 0930	Incorporating Technological Advances: Understanding How Emerging Technologies can Impact Laboratory Competence
0930 – 0945	Break
0945 – 1100	Performance Reviews & Feedback: Techniques for Providing Constructive Feedback & Conducting Effective Performance Reviews
1100 – 1215	Future Challenges in Laboratory Competence: Discussing Potential Future Challenges & how to Prepare for them
1215 – 1230	Break
1230 – 1345	Creating a Culture of Excellence: Strategies to Foster a Culture that Promotes Continuous Learning & Competence
1345 – 1400	Course Conclusion
1400 – 1415	POST-TEST
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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