SOUTH EAST TECHNOLOGICAL UNIVERSITY

COURSE EVALUATION 2

ASSESSORS' REPORT TO ACADEMIC COUNCIL

COURSE EVALUATED:	Bachelor of Science (H) in Laboratory Analysis
SCHOOL:	Science and Computing
DEPARTMENT:	Science

1. INTRODUCTION

The following is a review report to Academic Council from the panel of assessors on the proposal from the School of Science and Computing at South East Technological University to develop a Bachelor of Science (H) in Laboratory Analysis (Level 8; 60 Credits). In accordance with the regulations governing the evaluation of new programme proposals, as set out in the South East Technological University Waterford *Programme Quality Assurance Enhancement Policy and Procedures*, the programme proposal was reviewed by a panel of assessors.

The panel of assessors who contributed to this report were:

- Ciaran Lynch, Former Development Manager, Limerick Institute of Technology (Chair)
- Dr Geraldine Cleere, Academic Council Representative, South East Technological University
- Siobhan Lonergan**,** Microbiology Manager, Pinewood Healthcare, Tipperary
- Dr Aisling Masterson, Associate Director Analytical Laboratory, Horizon, Waterford
- Thomas McNicholas, Student Representative, Atlantic Technological University Galway
- Dr Colette Moloney, Assistant Registrar, South East Technological University
- Dr Brian Murphy**,** Senior Lecturer, Department of Pharmaceutical Sciences and Biotechnology, Technological University of the Shannon: Midlands Midwest
- Dr Orla Sherlock**,** Lecturer, Department of Life and Health Sciences, Dundalk Institute of Technology

In accordance with the regulations set out in the aforementioned *Programme Quality Assurance Enhancement Policy and Procedures*, a review meeting took place on 10 June 2022. The review meeting was conducted virtually via Teams. In the course of the meeting, the panel of assessors met with the programme development team. The following members of the South East Technological University team were present:

- Prof Peter McLoughlin, Head of School of Science and Computing
- Dr Orla O'Donovan, Head of Department of Science
- Eleanor Kent, Head of Department of Land Sciences
- Dr Michael Breen, Lecturer, Department of Science
- Ann Donegan, Lecturer, Department of Science
- Ambrose Hayden, Lecturer, Department of Science

- Dr Audrey Hearne, Lecturer, Department of Science
- Dr Nabla Kennedy, Lecturer, Department of Science
- Dr Ultan McCarthy, Lecturer, Department of Science
- Eleanor Owens, Lecturer, Department of Science
- Dr Richie Ryan, Lecturer, Department of Science
- Dr Bernadette Whelan, Lecturer, Department of Science

The assessors wish to thank the members of the development team for engaging generously and openly with the review process.

2. SUMMARY RECOMMENDATIONS AND CONDITIONS

2.1 General Remarks

The panel commends the School on their enthusiastic and highly qualified delivery team and on seeking to address the identified need of industry to upskill employees. The panel **recommends approval of the Bachelor of Science (H) in Laboratory Analysis** until the next School Review in the School of Science and Computing. **Approval is conditional on the submission of a revised programme document that takes account of the conditions and recommendations outlined below, and the successful review of the revised document by the panel; and the submission of a summary document describing the responses and actions of the School to address the conditions and recommendations made by the review panel.**

Areas for attention have been emboldened in the text for convenience of reference. Action is required on items marked 'Conditions' and such action is mandatory if the programme is to be approved; action is highly recommended on items marked 'Recommendations'.

2.2 Conditions

- **The School should consider if the area of cell biology is sufficiently covered in the Higher Certificate and/or Ordinary Degree which are prerequisites to this programme. If the target cohort of learners for this programme will not have sufficient existing expertise in cell biology on entry, the School should ensure that the concept of cell culture, and laboratory experience in cell culture is included in a module(s) in the Bachelor of Science (H) in Laboratory Analysis programme.**

- The team discussed the proposed programme in detail with the panel; this detail, however, is not reflected in the module descriptors. **The School should review all module descriptors to ensure that they reflect the description of the modules as discussed at the panel and as intended to be delivered, particularly in the areas of indicative content, learning outcomes, teaching, learning and assessment, and the industry-based effort hours. The School should also ensure that the modules are fully entered on the SETU Waterford Module Catalogue and that comprehensive reading lists are included. While there were some excellent exemplars of module learning outcomes, the School should review same to ensure that all are at the appropriate level, and use measurable verbs. The mapping for module to programme learning outcomes should be revised to ensure that it captures all instances where the programme learning outcomes are addressed** e.g. PLO2 is only addressed by two module outcomes but yet is quite generic in nature. **The programme learning outcomes should be mapped to the relevant SETU Award Standards for the level, rather than to the category of learning.**

- The programme entry requirements, as stated in the documentation, are very specific but in discussion with the panel, the team articulated a broader acceptable candidate base. **The School should review the entry requirements in the documentation to reflect the broader cohort of suitable prospective learners articulated. Clarification around RPL, eligibility of level 7 graduates from various science courses, and the suitability of students in both parttime and fulltime employment should be considered and articulated clearly.**

- A number of module descriptors have failed component and attendance requirements included for practical elements. **The School should review the modules for which these special regulations are proposed to ensure that all have practical elements. Any such derogation to SETU Waterford Academic Regulations should also be included in the relevant programme schedule as a Special Regulation.**

- **The School should revise the module descriptor for the 'Applied Project' module to ensure that it gives a comprehensive account of the nature of the proposed project and its assessment.** In discussion with the panel, the School mentioned the role of a work-based mentor but the module descriptor does not refer to same. **The School should amend the module descriptor to articulate the role of a work-based mentor in the supervision and assessment of the project, if one is proposed.** The supervision type as described by the

team and that included in the module descriptor and programme schedule are not consistent. **The School should review the documentation to ensure that the proposed learning modes are consistent and reflect the nature of the project supervision intended. The nature of the learning modes included, e.g. 'E-Learning', should be clarified and the extent of the different learning modes stated. A learning outcome to include project document maintenance and GDP should be added. Clear guidelines for the completion and assessment of desk-based versus lab-based projects should be provided. Essential reading materials should be revised to include documents guiding students how to research and prepare dissertations. Consideration should be given to the inclusion of a grade for a mentor's and supervisor's report, enabling the industry mentor as well as the academic supervisor to participate in student assessment.**

2.3 Recommendations

- In discussion with the panel, the team articulated a more varied and innovative approach to teaching and learning, particularly work-based learning, than that included in the programme document. **The School should revise the proposal document to capture the proposed teaching and learning methodologies, as communicated to the panel. At the panel meeting, the team also provided detail on the proposed induction and ongoing support programmes for learners; it would enhance the document, and be a valuable aid to prospective learners, if this detail is also included in the revised document.**

- **Going forward, the School should consider if the introduction of elective modules, to allow learners to choose a microbiology or chemistry pathway, might better meet learner and industry needs.**

- **The following are recommendations on individual modules:**

Module Title	Recommendation
Regulatory Affairs	**The School should consider if bespoke modules in the area of regulatory affairs, one tailored to the BSc (H) in Laboratory Analysis and another to the BSc (H) in Good Manufacturing Practice, would be more appropriate to meet the requirements of learners in the individual programmes. If it is decided to continue to propose a shared module in the subject,**

Module Title	Recommendation
	the School should review the content and learning outcomes to ensure that the module is applicable to both degree cohorts.
Lean Quality Operations	**The School should reconsider the title of the module to better suit the nature and learning outcomes of the module proposed. The volume of content proposed appears ambitious hence the School should review to ensure that it is achievable in the timescale.**
Advanced Topics in Analytical Chemistry	**The School should review the number of learning outcomes proposed, given the credits attached, and consider including further material on advanced spectroscopy and advanced chromatography in the reading lists.**
Applied Microbiology for Laboratory Analysis	**The school should review the proposed content and consider a focused QC Microbiology module given the programme is being developed for QC/QA graduates. A learning outcome to include microbiology regulatory affairs, audits and legislation would be beneficial.**

Signed: _____

Ciaran Lynch (Chair)

Date: _____