



VISION: To equip students with the knowledge and skills essential to practice in a range of science laboratories synonymous with their specialisms.

	Foci	Assessment	Knowledge Organiser
Unit 1	<ul style="list-style-type: none">Science Fundamentals <p>This unit will provide an understanding of scientific principles and practices by solidifying science fundamentals essential for science technicians.</p>	Exam 2 hours (January 2023)	Knowledge organisers will be provided in class
Unit 2	<ul style="list-style-type: none">Laboratory Techniques <p>The aim of this unit is to provide a good grounding in working in a laboratory. It covers the generic skills required by technicians working in any kind of scientific laboratory.</p> <p>Students will learn about the roles and duties of a scientific technician and the systems used to ensure the effective operation of a laboratory. They will also learn the importance of health and safety in the laboratory and know how to carry out and record the outcomes of standard laboratory procedures.</p>	Exam 2 hours (January 2024)	Knowledge organisers will be provided in class
Unit 6	<ul style="list-style-type: none">Control of hazards in a laboratory <p>Understanding the legal requirements and recognizing hazards will help students to identify and minimise many of the common safety and health hazards associated with running a research laboratory</p> <p>This unit presents an overview of the most common hazards associated with running a research laboratory and will help students maintain a safe working environment.</p>	60 Guided Learning Hours (Coursework)	Knowledge organisers will be provided in class
Unit 18	<ul style="list-style-type: none">Microbiology <p>This is the study of microorganisms. Some cause diseases but the vast majority are harmless. As new antimicrobial therapies have been developed, microorganisms have developed resistance to them and we face the possibility of unstoppable infectious diseases. The beneficial uses of microbes have been recognised and exploited in brewing, bread making and yoghurt production.</p> <p>In this unit, students will learn about the commercial use of microbes in food production and in medical microbiology. They will develop a range of practical manipulative skills including aseptic techniques and bacterial identification.</p>	60 Guided Learning Hours (Coursework)	Knowledge organisers will be provided in class
Unit 21	<ul style="list-style-type: none">Product testing techniques <p>Consumer products are rigorously tested and regulated before being allowed to be sold and after sale. In this unit students will have the opportunity to use knowledge and skills gained in unit 1 and 2 to test products.</p>	60 Guided Learning Hours (Coursework)	Knowledge organisers will be provided in class