

Module code	SC-2402		
Module Title	Biomarkers, Diseases and Diagnostics		
Degree/Diploma	Undergraduate GenNEXT Bachelor Degree		
Type of Module	Breadth		
Modular Credits	4	Total student workload	10 hours/week
		Contact hours	4 hours/week
Prerequisite	None		
Anti-requisite	None		
Aim:			
To understand the importance of biomarkers in diseases and how this knowledge can lead to the development of diagnostic tools that aid in disease detection and management.			
Learning Outcomes:			
<i>On successful completion of this module, a student will be expected to be able to:</i>			
Lower order :	20%	<ul style="list-style-type: none"> - Recall the pathology behind various diseases and their associated biomarkers - Describe the science underpinning commonly used tests conducted for the detection of diseases (from blood, saliva, urine, swab, tissue, body fluids, etc) 	
Middle order :	40%	<ul style="list-style-type: none"> - Interpret the results of commonly employed diagnostic tools - Review new trends, emerging techniques and applications in diagnostic technology - Identify the steps involved in developing a diagnostic test and bringing it to market 	
Higher order:	40%	<ul style="list-style-type: none"> - Evaluate recent advances and developments in biomedical diagnostics - Appraise the challenges that remain in biomedical diagnostics - Evaluate the disparities in disease detection and management from the developed and developing worlds 	
Module Contents			
<u>Diseases:</u>			
<ul style="list-style-type: none"> - Non-communicable diseases - Communicable diseases 			
<u>Biomarkers:</u>			
<ul style="list-style-type: none"> - Those related to above non-communicable diseases - Those related to communicable diseases 			
<u>Diagnostics:</u>			
<ul style="list-style-type: none"> - Nucleic acid diagnostics - Immunodiagnostics - Personalised diagnostics - From R&D to commercialisation of lab-based and point-of-care diagnostics 			
Assessment	Formative assessment	Tutorials and Feedback	
	Summative assessment	Coursework: 60% -2 Individual essays (30%) -1 Group Poster Presentation (30%) Examination: 40%	