

Module code	SC-4381		
Module Title	Drug Design, Delivery & Development		
Degree/Diploma	Bachelor of Science (Chemistry)		
Type of Module	Major Option		
Modular Credits	2	Total student Workload	4 hours/week
		Contact hours	2 hours/week
Prerequisite	None		
Anti-requisite	None		
<p><b>Aims</b></p> <p>The objective of this module is to provide students with an introduction to the technological and scientific principles underlying the discovery, synthesis, development and metabolism of modern drugs and of modern drug delivery systems. It will provide students with important knowledge and skills for potential employment in the pharmaceutical industry.</p>			
<p><b>Learning Outcomes</b></p> <p><i>On successful completion of this module, a student will be expected to be able to:</i></p>			
Lower order:	50%	<ul style="list-style-type: none"> <li>- Understand the principles underlying the discovery, synthesis, development and metabolism of modern drugs and drug delivery systems.</li> <li>- Understand the principles of synthesis in drug discovery.</li> </ul>	
Middle order:	30%	<ul style="list-style-type: none"> <li>- describe different synthesis methods in drug design and development</li> <li>- interpret the data in the structure elucidation of natural and synthesise drugs.</li> </ul>	
Higher order:	20%	<ul style="list-style-type: none"> <li>- working independently and cooperatively in group discussion/presentation on drug design and development.</li> </ul>	
<p><b>Module Contents</b></p> <ul style="list-style-type: none"> <li>- <i>Drug Design &amp; Development</i></li> <li>- <i>CombiChem</i></li> <li>- <i>Synthesis in Drug Discovery</i></li> <li>- <i>Structure Elucidation</i></li> <li>- <i>Natural Product Chemistry</i></li> <li>- <i>Screening</i></li> <li>- <i>Tropical Diseases</i></li> <li>- <i>Metabolism</i></li> <li>- <i>Molecular Modelling</i></li> <li>- <i>Drug Delivery</i></li> </ul>			
Assessment	Formative assessment	Tutorial and feedback	
	Summative assessment	Examination: 60% Coursework: 40% <ul style="list-style-type: none"> <li>- 2 written assignments (20%)</li> <li>- 2 class tests (20%)</li> </ul>	