



UNIVERSITI TEKNOLOGI MARA

CSI152: CHEMICAL PATHOLOGY I

<b>Course Name (English)</b>	CHEMICAL PATHOLOGY I <b>APPROVED</b>		
<b>Course Code</b>	CSI152		
<b>MQF Credit</b>	1		
<b>Course Description</b>	This course is designed to introduce the students to laboratory fundamentals and the various laboratory instruments used in chemical analysis of biological specimens with emphasis on principles, components, operation and maintenance of these instruments. Students are also introduced to urine and protein analysis.		
<b>Transferable Skills</b>	C1, C2, C3, C5, C6, A1, A2, A5, P1		
<b>Teaching Methodologies</b>	Lectures, Blended Learning, Lab Work, Practical Classes, Tutorial, Discussion, Presentation		
<b>CLO</b>	CLO1 Prepare chemicals, reagents and standard solutions. CLO2 Operate basic laboratory and analytical instruments. CLO3 Use mathematical calculations to prepare reagents, stock solutions and preparation of calibration curves. CLO4 Describe the procedure for protein and urine analysis. CLO5 Perform protein test and urinalysis		
<b>Pre-Requisite Courses</b>	No course recommendations		
<b>Reading List</b>	<table border="1"><tr><td><b>Reference Book Resources</b></td><td><ul style="list-style-type: none"><li>• Carl Burtis, Edward Ashwood, David Bruns 2006, <i>Tietz Fundamentals of Clinical chemistry</i>, 6th Edition Ed., Saunders WB Company.</li><li>• Tietz NW, <i>Fundamentals of clinical chemistry</i></li><li>• Bishop Michael, Duben-Von Lauten Janet, Fody Edward, <i>Clinical Chemistry: Principles, procedures and correlations</i></li><li>• Kaplan LA, Pesce AJ (Eds)., <i>Clinical chemistry: theory, analysis and correlation</i></li><li>• Kaplan A., Jack Rhona, Opheim Kent, Taivola Bert, Lyon Andrew, <i>Clinical chemistry: interpretation and techniques</i></li><li>• Karselix Terence, <i>Clinical Laboratory Instrumentation</i></li><li>• Schoeff Larry and Williams, Robert H, <i>Principles of Laboratory Instruments</i></li></ul></td></tr></table>	<b>Reference Book Resources</b>	<ul style="list-style-type: none"><li>• Carl Burtis, Edward Ashwood, David Bruns 2006, <i>Tietz Fundamentals of Clinical chemistry</i>, 6th Edition Ed., Saunders WB Company.</li><li>• Tietz NW, <i>Fundamentals of clinical chemistry</i></li><li>• Bishop Michael, Duben-Von Lauten Janet, Fody Edward, <i>Clinical Chemistry: Principles, procedures and correlations</i></li><li>• Kaplan LA, Pesce AJ (Eds)., <i>Clinical chemistry: theory, analysis and correlation</i></li><li>• Kaplan A., Jack Rhona, Opheim Kent, Taivola Bert, Lyon Andrew, <i>Clinical chemistry: interpretation and techniques</i></li><li>• Karselix Terence, <i>Clinical Laboratory Instrumentation</i></li><li>• Schoeff Larry and Williams, Robert H, <i>Principles of Laboratory Instruments</i></li></ul>
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<b>Article/Paper List</b>	This Course does not have any article/paper resources		
<b>Other References</b>	This Course does not have any other resources		

