

Subject Description Form

Subject Code	ABCT4117
Subject Title	Advanced Anatomical Pathology
Credit Value	3
Level	3
Pre-requisite	Anatomical Pathology (ABCT3110)
Objectives	<p>Through lectures and practical sessions:</p> <ol style="list-style-type: none"> 1. to provide students an understanding of the knowledge of the advanced diagnostic technologies and their applications in Anatomical Pathology laboratories; 2. to equip students to perform appropriate cytological sample preparation and staining.
Intended Learning Outcomes	<p>Upon completion of the subject, students will be able to:</p> <ol style="list-style-type: none"> a. know the clinical practice in special tissue handling. b. understand the principles of various advanced diagnostic technologies in histology and cytology. c. perform cytological sample preparation, staining and microscopic examination with appropriate skills. d. evaluate histopathological and cytological test results for diagnosis of disease.
Subject Synopsis/ Indicative Syllabus	<p>Special tissue handling:</p> <ul style="list-style-type: none"> • Various types of biopsy sample handling and processing <p>Histopathology:</p> <ul style="list-style-type: none"> • Basic concepts in identification of abnormal cells and pathological features in tumours and malignancy <p>Cytology:</p> <ul style="list-style-type: none"> • Sample collection and processing • Cytological smear preparation and staining • Cytological features of normal cellular constituents, common changes shown in cells in relation to disease and associated malignancy <p>Advanced laboratory technologies in Anatomical Pathology:</p> <ul style="list-style-type: none"> • Immunohistochemistry (IHC) and immunocytochemistry (ICC) • Molecular diagnosis in Anatomical Pathology • Electron microscopy

Teaching/Learning Methodology	<p>Lecture: to introduce and reinforce knowledge, principles and concepts</p> <p>Practical session: to perform laboratory tests and result evaluation</p> <p>Tutorial: to relate theories to clinical practice through discussion</p>																																																						
Assessment Methods in Alignment with Intended Learning Outcomes	<table border="1"> <thead> <tr> <th rowspan="2">Specific assessment methods/tasks</th> <th rowspan="2">Percentage weighting</th> <th colspan="4">Intended subject learning outcomes to be assessed</th> </tr> <tr> <th>a</th> <th>b</th> <th>c</th> <th>d</th> </tr> </thead> <tbody> <tr> <td>1. Assignments</td> <td>30%</td> <td>✓</td> <td></td> <td>✓</td> <td>✓</td> </tr> <tr> <td>2. Quizzes / Tests</td> <td>30%</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> </tr> <tr> <td>3. Examination</td> <td>40%</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> </tr> <tr> <td>Total</td> <td>100%</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p>Assignments will assess students' understanding in special histological sample and cytological sample handling.</p> <p>Quizzes and tests will assess students' ability to evaluate histopathological and cytological staining results; the understanding of basic concepts of advanced diagnostic techniques in Anatomical Pathology.</p> <p>Examination combines written questions and practical assessment component. It will assess students' practical competence; knowledge application; and clinical result analysis.</p> <p>Students are required to attend at least 75% of scheduled sessions for subjects. Failure to fulfill the attendance requirement may result in a student being unable to attain a passing grade in this subject.</p>						Specific assessment methods/tasks	Percentage weighting	Intended subject learning outcomes to be assessed				a	b	c	d	1. Assignments	30%	✓		✓	✓	2. Quizzes / Tests	30%	✓	✓	✓	✓	3. Examination	40%	✓	✓	✓	✓	Total	100%																			
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Reading List and References	<p><i>Cellular Pathology: an introduction to techniques and applications.</i> (2015) 3rd Ed. Cook J, Warren PJ. Scion Publishing Ltd. Oxfordshire UK.</p> <p><i>Theory and Practice of Histological Technique.</i> (2013) Suvarna KS, Layton C, Bancroft JD. 7th Ed. Churchill Livingstone: Edinburgh.</p>																																																						

	<p><i>Practical Principles of Cytopathology Revised.</i> (2007) Demay RM. American Society for Clinical Pathology Press: Washington.</p>
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