

## CHART OF DISCIPLINE/ SYLLABUS

### 1. Study Program Data

1.1 High Education Institution	UNIVERSITY OF MEDICINE AND PHARMACY „Victor Babes” TIMISOARA
1.2 Faculty	MEDICINE
1.3 Department	II – MICROSCOPIC MORPHOLOGY
1.4 Study Domain	HEALTH
1.5 Cycle Studies	LICENCE
1.6 Study programme/ Qualification	MEDICINE/MEDICAL DOCTOR

### 2. Course Data

2.1.Discipline	CLINICAL PATHOLOGY (CLINICAL ANATOMICAL PATHOLOGY)							
2.2 Course tutor	Lecturer Vaduva Adrian, MD, PhD							
2.3 Practical activity tutors	Lecturer Vaduva Adrian, MD, PhD							
2.4. Year of study	V	2.5 Semester	9	2.6 Assessment	Coloquim	2.7 Course rank	Content <sup>1)</sup>	DS
							Mandatory /Compulsory <sup>2)</sup>	DFA

### 3. Duration/Estimated Time (number of hours/ semester of teaching activity)

3.1 Number of hours/ week	2	3.2 lecture/course <sup>3)</sup>	1	3.3 laboratory <sup>4)</sup>	1
3.4 Total hours of curriculum	28	3.5 lecture/course <sup>5)</sup>	14	3.6 laboratory <sup>6)</sup>	14
Time distribution for course activities					hours
Study support- manuals, lectures, references and notes <sup>7</sup>					
Additional documentation – library, dedicated platforms from domain <sup>7</sup>					
Documentation for seminars/ practical activity/ projects, themes, portfolios and essays					
Examination <sup>7</sup>					2
3.7 Total number of hours for individual study	2				
3.8 Total number of hours per semester	30				
3.9 Number of credits <sup>8)</sup>	1				

### 4. Preconditions (if applicable and requested)

4.1 Courses- studied curriculum / rules for attending the course	Morfopathology, Oncology, Internal Medicine
4.2 Practical activities/seminars/projects studied curriculum, basic skills/ rules for attending the course	The ability to use electronic devices (mostly PC) to visualize histopathological images.

### 5. Condition (if if applicable and requested)

5.1 Courses	<ul style="list-style-type: none"> <li>Attendance to courses is mandatory, a student can only have a maximum of 50% of absences from the total of attendances.</li> <li>Students are obligated to obey to the rules and internal laws of UMFT.</li> <li>A course cannot be recorded or filmed without the express accordance of the teaching staff member responsible for the course.</li> <li>Lateness to the course is not allowed, for the wellbeing of the course dynamics.</li> </ul>
5.2 Laboratory/practical activity/ project	<ul style="list-style-type: none"> <li>Attendance at practical courses is mandatory, with a maximum of 20% of total absences being accepted.</li> <li>A percentage of 30% of absences can be paid and recovered during the scheduled period.</li> <li>A practical course cannot be recorded or filmed without the express accordance of the teaching staff member responsible for the practical course / lab.</li> <li>Lateness to the lab is not allowed, for the wellbeing of the lab dynamics.</li> <li>The coloquim will take place in the pre-session (PowerPoint presentation of a special/interesting clinical case).</li> </ul>

### 6. Key competencies and basic skills

<b>Professional Competencies</b>	<ol style="list-style-type: none"> <li>1. Knowledge of the diagnostic methods used in Pathological Anatomy, the specific indications for application and their value.</li> <li>2. Knowledge of the notions of pathological anatomy, of the structural changes underlying various diseases, which will allow the understanding and interpretation of pathological reports.</li> <li>3. To accumulate knowledge referring to morphological parameters involved in the evaluation of the prognosis and their therapeutic implications</li> <li>4. Developing the ability to recognize the importance of morphopathological disciplines in understanding the clinical context of pathology manifestation.</li> </ol>
<b>Transversal Competencies</b>	<ol style="list-style-type: none"> <li>1. Knowledge of the route and norms applied to biological products collected in a hospital in order to obtain a cyto- or histopathological diagnosis.</li> <li>2. Knowledge of sampling methods for a pathological product containing tissue material for histological processing.</li> <li>3. Effective use of theoretical concepts learned in clinical pathology for their application in medical practice.</li> <li>4. Using the results obtained in other fields of science and medicine, highlighting the interdisciplinary character and emphasizing the role of morphopathology in the development of other medical fields.</li> </ol>

#### 7. Disciplines/Course objectives (based on the key competences)

7.1 Disciplines/Course general objectives	<ul style="list-style-type: none"> <li>• Knowledge and understanding of macroscopic and histopathological diagnostic criteria.</li> <li>• Knowledge of diagnostic methods used in pathological anatomy, specific application indications and their value.</li> </ul>
7.2 Disciplines/Course specific objectives	<ul style="list-style-type: none"> <li>• Knowledge and understanding of positive and differential diagnosis of diseases, as well as lesions in a clinical context, necessary for the development of effective therapeutic management.</li> <li>• Knowledge of grading and staging methods for cancer.</li> <li>• Knowledge of the role of tumor markers in the diagnosis, treatment and prognosis of cancer.</li> <li>• Developing communication skills, doctor-patient, doctor-colleague interrelationships between various specialties and disciplines.</li> </ul>

#### 8. Rezultatele învățării

<b>Knowledge</b>	<p>The student/graduate:</p> <ul style="list-style-type: none"> <li>• Understands and uses the terminology used in pathological anatomy.</li> <li>• Knows modern histopathological diagnostic techniques according to current protocols for performing special immunohistochemical (IHC) stains.</li> <li>• Knows the principles of the international classification of oncological diseases developed by the WHO (ICD-O).</li> <li>• Knows the tumor markers with predictive value and in therapeutic monitoring.</li> </ul>
<b>Abilities</b>	<p>The student/graduate:</p> <ul style="list-style-type: none"> <li>• Selects and appropriately uses the knowledge obtained, in order to achieve anatomical-clinical correlations.</li> <li>• Explains and interprets a histopathological report.</li> <li>• Understand the evaluation of estrogen receptors, progesterone receptors and HER2 in breast cancer.</li> <li>• Acquire the necessary concepts to understand the molecular classification of breast cancers.</li> </ul>
<b>Responsibilities and autonomy</b>	<p>The student/graduate:</p> <ul style="list-style-type: none"> <li>• Identifies the conditions, stages and working times in the evaluation and processing of biopsies.</li> <li>• Understands the terms of performance and the risks that may arise in the processing of cytology/tissue fragments for the purpose of performing the anatomopathological examination.</li> <li>• Argues for the use of certain techniques and recommends practical solutions in concrete situations.</li> <li>• Respects the principles of academic ethics and deontological conduct.</li> <li>• Identify the roles and responsibilities in a team, interrelates and works effectively within the team.</li> <li>• Appropriately uses communication and training resources for professional development purposes.</li> </ul>

#### 9. Content

##### 9.1. Teaching methods

- Means: interactive communication + problematization + debate.  
Lectures/PowerPoint presentations with representative imaging from the course curriculum. The material is continuously revised to include the latest information in the field of pathological anatomy.
- Teachers encourage the use of information from electronic or edited pathology reference books as well as websites with histopathological images (including scanned slides) and virtual macroscopic specimens.



9.2 Course	Number of hours
1. The relationship between clinician and pathologist – good practices – part 1	1
2. The relationship between clinician and pathologist – good practices – part 2	1
3. Tumors: general aspects, pathological classification.	1
4. General principles in the grading and staging of cancer	1
5. Tumors: Serum and tissue tumor markers with diagnostic, prognostic and predictive values	1
6. The importance of cytological diagnosis in tumoral and non-tumoral pathology. The Bethesda system terminology	1
7. The technique of obtaining cytological smears and cell blocks.	1
8. Digital pathology in anatomic pathology laboratory practice	1
9. Breast cancer: Classification of breast tumors according to classical parameters.	1
10. Breast cancer: Prognostic and predictive factors. Assessment of ER, PR, HER2 markers in breast cancer	1
11. Premalignant and malignant lesions of the large bowel: Clinical, endoscopic and pathological aspects	1
12. Premalignant and malignant lesions of the large bowel: TNM staging of colorectal cancer. Prognostic and predictive factors. Therapeutic principles, according to the clinical stage and molecular biomarker assessment	1
13. Bethesda system for cervical cytology	1
14. Therapeutic implications of the molecular classification of the uterine body and ovarian malignant tumors	1
<p><b>Mandatory references:</b></p> <ol style="list-style-type: none"> <li>1. Dema A., et al.- General Morphopathology, “Victor Babeş” Publishing House, Timisoara, 2019, electronic version, ebook.</li> <li>2. Dema A., et al.- Special Morphopathology, “Victor Babeş” Publishing House, Timisoara, 2022, electronic version, ebook.</li> <li>3. Courses in the form of PowerPoint presentations available on the Moodle e-learning platform, for third-year general medicine students.</li> <li>4. Laboratory protocols and practical works in the form of PowerPoint presentations, available on the Moodle e-learning platform, for third-year general medicine students.</li> </ol> <p><b>Optional references:</b></p> <ol style="list-style-type: none"> <li>1. Kumar V., Abbas A.K., Aster J. - Robbins &amp; Cotran Pathologic Basis of Disease, 10th ed, Saunders Elsevier, 2020</li> <li>2. Strayer D.S., Saffitz J.E., Rubin E. - Rubin’s pathology, 8th ed, Lippincott Williams &amp; Wilkins, 2019.</li> </ol>	

9.3 Seminars/ Laboratory/practical activity/ projects	Teaching-learning, methods	Number of hours	Notification
1. Clinical cases presentations related to the theme of course number 1	<ul style="list-style-type: none"> <li>• Demonstration on how to interpret a histopathological diagnosis.</li> <li>• Clinical cases presentations with anatomo-clinical and paraclinic testing correlations.</li> </ul>	1	
2. Clinical cases presentations related to the theme of course number 2		1	
3. Clinical cases presentations related to the theme of course number 3		1	
4. Clinical cases presentations related to the theme of course number 4		1	
5. Clinical cases presentations related to the theme of course number 5		1	
6. Clinical cases presentations related to the theme of course number 6		1	
7. Clinical cases presentations related to the theme of course number 7		1	
8. Clinical cases presentations related to the theme of course number 8		1	
9. Clinical cases presentations related to the theme of course number 9		1	
10. Clinical cases presentations related to the theme of course number 10		1	



11. Clinical cases presentations related to the theme of course number 11		1	
12 Clinical cases presentations related to the theme of course number 12		1	
13. Clinical cases presentations related to the theme of course number 13		1	
14. Clinical cases presentations related to the theme of course number 14		1	
<p><b>Mandatory references:</b></p> <ol style="list-style-type: none"> <li>1. Dema A., et al.- General Morphopathology, "Victor Babeş" Publishing House, Timisoara, 2019, electronic version, ebook.</li> <li>2. Dema A., et al.- Special Morphopathology, "Victor Babeş" Publishing House, Timisoara, 2022, electronic version, ebook.</li> <li>3. Courses in the form of PowerPoint presentations available on the Moodle e-learning platform, for third-year general medicine students.</li> <li>4. Laboratory protocols and practical works in the form of PowerPoint presentations, available on the Moodle e-learning platform, for third-year general medicine students.</li> </ol> <p><b>Optional references:</b></p> <ol style="list-style-type: none"> <li>1. Kumar V., Abbas A.K., Aster J. - Robbins &amp; Cotran Pathologic Basis of Disease, 10th ed, Saunders Elsevier, 2020</li> <li>2. Strayer D.S., Saffitz J.E., Rubin E. - Rubin's pathology, 8th ed, Lippincott Williams &amp; Wilkins, 2019.</li> </ol>			

#### 10. Correlations between the content of the course and the requirements of the professional field and relevant employers


<ul style="list-style-type: none"> <li>• The subject's curriculum is thus constructed so that it facilitates the formation of professional competencies (specific to the profession), and transversal competencies;</li> <li>• The content of courses/practical courses delivers concepts and basic skills required for postgraduate specializations (residency);</li> <li>• The content of the discipline is corroborated with demands from the market profile - highly qualified medical professional;</li> <li>• The content of the courses/practical courses was carefully selected after studying the analytical programs from other profile universities from Romania and abroad.</li> </ul>
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#### 11. Assessment

Activity	11.1 Assessment criteries	11.2 Assessment methods	11.3 Percentage of the final grade
11.4 Colloquim	The examination is conducted according to the training curriculum. The passing grade is grade 5.	PowerPoint presentation of a particular clinical case	100%
<p>11.5 Minimum performance standard-basic knowledge</p> <ul style="list-style-type: none"> <li>- Knowledge of the principle of the international classification of oncological diseases according to the WHO (ICD-O)</li> <li>- Knowledge of the notion of tumor marker</li> <li>- Knowledge of the tumor markers with predictive and therapeutical monitoring value</li> <li>- Knowledge of the molecular classification of breast cancer</li> <li>- Knowledge of the assessment of the ER, PR, HER2 markers in breast cancer</li> </ul>			

Date  10.10.2025	Signature of the course holder  Lecturer Vaduva Adrian 	Signature of the laboratory/seminar holder  Lecturer Vaduva Adrian 
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Signature of the Head of Discipline Prof. Dr. ALIS DEMA 		
Date of approval in the Department 13.10.2025	Signature of the Head of Department Prof. Dr. DEMA ALIS 