### CURRICULUM – 1st year
#### 2023-2024

**UNIVERSITY**  
"GEORGE EMIL PALADE" UNIVERSITY OF MEDICINE, PHARMACY, SCIENCE, AND TECHNOLOGY OF TIRGU MURES  

**MASTER'S STUDY PROGRAM**  
ADVANCED LABORATORY TECHNIQUES

**FACULTY**  
FACULTY OF MEDICINE

**FIELD OF STUDY**  
MEDICINE

**DURATION**  
2 years

**LEVEL OF REGULATION**  
Level 7 EFQ/CEC and CNC

**TRANSFERABLE EUROPEAN CREDITS (ECTS)**  
60 (COMPULSORY AND OPTIONAL)

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#### 1st Semester I (14 weeks)

<table>
<thead>
<tr>
<th>No.</th>
<th>Educational activities Subjects</th>
<th>Code/Type of subjects*</th>
<th>Modul I (7 weeks)</th>
<th>Modul II (7 weeks)</th>
<th>Modul III (7 weeks)</th>
<th>Modul IV (7 weeks)</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Lecture</td>
<td>PA</td>
<td>ECTS</td>
<td>Type of Assessment</td>
<td>Lecture</td>
</tr>
<tr>
<td>1.</td>
<td>Collection and processing of biological products</td>
<td>LCL108/DS</td>
<td>2</td>
<td>5</td>
<td>E</td>
<td>14</td>
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<tr>
<td>2.</td>
<td>Quality management in the medical analysis laboratory</td>
<td>LCL109/AKS</td>
<td>2</td>
<td>4</td>
<td>E</td>
<td>14</td>
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<td>3.</td>
<td>Transfusion hematology</td>
<td>LCL107/AKS</td>
<td>2</td>
<td>4</td>
<td>E</td>
<td>14</td>
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<tr>
<td>4.</td>
<td>Analytical principles and biochemistry techniques</td>
<td>LCL110/AKS</td>
<td>4</td>
<td>4</td>
<td>7</td>
<td>E</td>
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<tr>
<td>5.</td>
<td>Analysis of biological fluids</td>
<td>LCL111/SS</td>
<td>2</td>
<td>4</td>
<td>E</td>
<td>14</td>
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<tr>
<td>6.</td>
<td>Laboratory diagnosis of infection</td>
<td>LCL112/AKS</td>
<td>2</td>
<td>4</td>
<td>6</td>
<td>E</td>
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<tr>
<td>7.</td>
<td>Ethics and academic integrity</td>
<td>LCL113/SS</td>
<td>2</td>
<td>-</td>
<td>3</td>
<td>E</td>
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<tr>
<td>8.</td>
<td>Advanced scientific research</td>
<td>LCL114/AKS</td>
<td>4</td>
<td>2</td>
<td>5</td>
<td>V/C</td>
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<tr>
<td>9.</td>
<td>Immunological diagnosis</td>
<td>LCL115/AKS</td>
<td>2</td>
<td>4</td>
<td>6</td>
<td>E</td>
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<tr>
<td>10.</td>
<td>Applied biostatistics</td>
<td>LCL116/DS</td>
<td>4</td>
<td>4</td>
<td>6</td>
<td>V/C</td>
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<tr>
<td>11.</td>
<td>Optional subject**</td>
<td>LCL117/SS</td>
<td>2</td>
<td>4</td>
<td>V</td>
<td>14</td>
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<td>12.</td>
<td>GRAND TOTAL</td>
<td>ZDS, 3SS, 6AKS</td>
<td>6</td>
<td>8</td>
<td>16</td>
<td>2E;1V</td>
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<td>TOTAL HOURS; CREDITS</td>
<td></td>
<td>14 hours/week; 30 ECTS</td>
<td>14 hours/week; 30 ECTS</td>
<td>406</td>
<td></td>
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</tbody>
</table>

**Optional subjects/a subject of your choice from:**

Pack 1, 2 or 3

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**RECTOR,**  
Prof. Leonard Azamfirei, MD, Ph

**IOSUM DIRECTOR,**  
Prof. Tatiana Dănescu, MD, Ph

**DEAN,**  
Prof. Ovidiu S. Cotoi, MD, Ph

**RESPONSIBLE FOR THE PROGRAM,**  
Prof. Anca Bacărea, MD, Ph

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*DS - Deepening subject; SS - synthesis subject; AKS - advanced knowledge subject  
E – exam; C – colloquy; V – verification, PA – Practical Activities; ECTS – Transferable European Credits; Indiv. study – individual study

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Ratio theory/practical activity (Practical activities, Internship, Seminar, Practice): 196/210= 1/1,07; Ratio exams/verifications= 7/4
### CURRICULUM – 2nd year
#### 2024-2025

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**DURATION**
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**TRANSFERABLE EUROPEAN CREDITS (ECTS)**
60 (COMPULSORY AND OPTIONAL)

<table>
<thead>
<tr>
<th>No.</th>
<th>Educational activities Subjects</th>
<th>Code/Type of subjects*</th>
<th>1st Semester I (14 weeks)</th>
<th>2nd Semester (14 weeks)</th>
<th>Total per 1st Module academic year</th>
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<tbody>
<tr>
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<td>Lect</td>
<td>PA</td>
<td>ECTS</td>
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<tr>
<td>1</td>
<td>Genetic diagnosis</td>
<td>LCL210/OBL/DS</td>
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<td>2</td>
<td>Cytopathology and immunohistochemistry</td>
<td>LCL211/OBL/AKS</td>
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<td>Clinical correlations</td>
<td>LCL212/OBL/AKS</td>
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<td>4</td>
<td>Cytology of smear fluids</td>
<td>LCL209/OBL/AKS</td>
<td>2</td>
<td>2</td>
<td>4</td>
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<tr>
<td>5</td>
<td>Laboratory diagnosis of hematological diseases</td>
<td>LCL201/OBL/AKS</td>
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<td>4</td>
<td>7</td>
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<tr>
<td>6</td>
<td>Information systems in the clinical laboratory</td>
<td>LCL213/OBL/AKS</td>
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<td>4</td>
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<td>7</td>
<td>Medical bacteriology</td>
<td>LCL214/OBL/DS</td>
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<td>8</td>
<td>Molecular diagnosis</td>
<td>LCL215/OBL/AKS</td>
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<td>4</td>
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<td>9</td>
<td>Optional Discipline**</td>
<td>LCL216/OPT/SS</td>
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<td>10</td>
<td>Specialized practice***</td>
<td>LCL217/OBL/SS</td>
<td>2</td>
<td>4</td>
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<td>11</td>
<td>Defense of the dissertation</td>
<td></td>
<td>-</td>
<td>-</td>
<td>4</td>
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</table>

**GRAND TOTAL**
2DS, 2S, 6AKS
6 8 14 6 8 16 6 8 14 2E; 6 6 16 1E; 3V

**TOTAL HOURS; CREDITS**
14 hours/week; 30 ECTS
13 hours/week; 30 ECTS
420
60 + 10

**Ratio theory/practical activity (Practical activities, Internship, Seminar, Practice): 168/252= 1/1.5  Ratio exams/verifications= 7/4
**
**Specialized practice 7 weeks  2 days /week x 3 hours/day = 42 ore
**
DS - Deepening subject; SS - synthesis subject; AKS - advanced knowledge subject
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