ANALYTIC PROGRAM
„Internal Medicine- Semiology”
(for the students of the II year, Faculty of Dentistry)

Total hours -51, course-17, practical classes-34, evaluation form – undifferentiated colloquium
Course code: S.04.O.045
Type of course: Compulsory
Number of credits allocated to the course unit: 2

The purpose of the discipline Internal Medicine - Semiology:
The study of clinical examination methods of therapeutic patients, of the main laboratory and instrumental diagnostic methods (learning about the more complicated ones);
- To teach how to spot the symptoms of internal organ diseases and to understand and explain their origins;
- To teach how to explain the diagnosis of a syndrome;
- To teach the importance of the role of symptoms and syndromes in the diagnosis of some of the most important diseases, with the explanation of the urgent medical help principles in these diseases.

Training objectives of the future physician in the discipline Internal Medicine - Semiology:

Knowledge and understanding:
- Knowledge of the basis of ethics and medical deontology;
- Forming an integral vision of the healthy human body;
- Knowledge of a patient’s clinical exploration plan;
- Knowledge of key laboratory and instrumental investigations of the patient;

At the application level
- Implementation in clinical practice of the knowledge in ethics and medical deontology
- Conducting a full clinical examination of the patient on all systems
- Detection of internal organ disease symptoms and their order of appearance
- Clinical interpretation of the most important laboratory (complete blood count, urine analysis etc.) and instrumental (ECG, EcoCG etc.) investigation results
- Aggregation of symptoms in syndromes based on their common origin in the disease process.
- Argumentation of one’s own clinical opinion.

At the integration level
- To assess the importance of Internal Medicine /Semiology within Medicine
- To apply the fundamental medical knowledge creatively in the process of a patient’s examination
- To deduce the interrelations between Internal Medicine -Semiology and other fundamental and clinical disciplines
- To possess the ability to implement and integrate the semiological knowledge obtained in clinical trials
- To be able to evaluate and autoevaluate the knowledge in this field;
- To be able to assimilate the novelties of the clinical disciplines.

Conditioning and prior requirements:
Internal medicine is one of the basic clinical disciplines in the university training of doctors, regardless of the field they will choose subsequently, that studying at the university stage will enable future doctors acquire the fundamental principles of clinical work with patients. The
Semiaiology of internal diseases is an early stage in shaping the future specialist in the field of internal medicine.

Being an integral part of Internal Diseases, the course of Medical Semiology aims to form the basis of clinical rationality and medical ethics, to teach them the professional skills needed in clinical and paraclinical examination, as well as the treatment of the sick, skills necessary to any doctor in any medical field.

For a better learning and understanding of the subject, sound knowledge in chemistry and human anatomy and histology, embryology, molecular biology, genetics, human physiology, physiopathology, morphopathology, pharmacology, and logics, which is obtained in preuniversity and university studies.

The basic content of the course:

A. **Lectures:**

<table>
<thead>
<tr>
<th>No.</th>
<th>Theme</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introductory course in Semiology of internal diseases. Medical Ethics. Examination of the patient.</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>Exploration of patients with respiratory diseases: complaints, anamnesis, inspection. Palpation of the chest. Comparative percussion of the lungs.</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>Lung auscultation. Main respiratory noise and superadded noises.</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>Examination of patients with cardiovascular disease: complaints and history, inspection, palpation of the heart and blood vessels. Relative percussion of the heart.</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>Listening of the heart. Examination of peripheral vessels. Peripheral arterial pulse appreciation and blood pressure. Complementary methods for the examination of the cardiovascular system.</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>Methods of examination of the patients with diseases of the digestive tract, liver, gallbladder and spleen: complaints and history, inspection, palpation of the abdomen. Percussion and palpation of the liver.</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>Clinical and laboratory methods of examination of patients with kidney and urinary tract diseases.</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>Methods of examination of patients with disorders of the endocrine system: complaints and history; inspection.</td>
<td>2</td>
</tr>
<tr>
<td>9</td>
<td>Methods of examination of patients with diseases of the hematologic system.</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL</strong></td>
<td><strong>17 h</strong></td>
</tr>
</tbody>
</table>

B. **Practical skills:**

<table>
<thead>
<tr>
<th>No.</th>
<th>Theme</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction. Medical ethics. Medical documentation. Plan review of the patient. Interrogation. Primary and general complaints. Disease history and current life history.</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>General inspection. Exploration of patients with respiratory diseases: complaints, anamnesis, inspection. Palpation of the chest.</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>Comparative and topographic percussion of the lungs.</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>Auscultation of the lung. Main respiratory noise. Superadded respiratory noises</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>Testing the professional skills of the respiratory system.</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>Examination of the patients with cardiovascular disease: complaints and history, inspection, palpation of the heart and blood vessels larger region.</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>Relative percussion of the heart.</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>Listening of the heart. Examination of peripheral vessels. Peripheral arterial pulse appreciation and blood pressure.</td>
<td>2</td>
</tr>
</tbody>
</table>
Methods of learning and teaching:

The internal Medicine - Semiology discipline is taught in the classical way: with lectures and practical work. During the practical work lessons students will study the methodology of clinical examination of the patient, detection of clinical signs and symptoms and their clinical interpretation, will visit the sick patients for clinical examination, initially together with teacher, then alone or in small groups. Subsequently, based on symptoms and clinical signs detected, the clinical interpretation of the given patient will be made, will get to know the results of the laboratory tests. The ultimate goal is to develop the clinical reasoning skills of the student and clinical examination of the patient, with syndrome diagnosis, drawing the program of laboratory investigations and treatment principles. The knowledge gained will be certified during the course and practical skills will be assessed at the end of the course, which allows to perform the monitoring of the training process and efficiency, operative correction of the teaching process.

Suggestions for individual activity

From a pedagogical point of view, one of the less efficient learning methods is the passive listening of courses, even in the case of a well-structured and illustrated course, implying the use of multimedia technology.

Even if the material is interesting and the student motivated enough, in order to learn something many ways of processing the studied material are needed.

The practical fulfillment is more efficient than reading about how it should be done, but even more efficient is teaching someone how it should be done.

Based on the above, if you want to have success in acquiring Internal Medicine - Semiology, active work with the material is needed. Below we offer some suggestions:

1. Initially read the material, but not only by doing only that. Make notes. Try to interpret the main ideas yourself. Study the schematics from the textbook and your notebook. Do the tests from your notebook.
2. Frequent the practical and theoretical lessons, but not only through your physical presence! By doing that, it is less likely you’ll make it to the end of the course. Take the right notes. Try to understand the information by asking yourself: Do I agree with the teacher? Do I understand what the lesson is about? Is the topic of the lesson the same as the one in the textbook?
3. Ask questions! The teacher, one another and yourself. Do this everywhere, ranging from the lecture hall to the teacher’s office. The fact that you ask questions means that you understand the
material and are working with it, a fact which is highly commendable. Each student has the right to ask the teacher for individual lessons within his/her working hours, the lessons meant to recover lost course time.

4. Organise yourselves in groups of 2-3 persons and meet up to talk about the course material and to prepare yourselves for finals and mid-terms. Usually it’s easier to learn the material in small groups than by yourself or in large ones. Additionally, the ability to explain the material to your colleagues will facilitate work in the future.

5. An efficient way of profound learning is to participate in the scientific meetings of the student body and to participate in scientific discussions. Also doing scientific reports for some lessons can be very useful.

6. Use your time rationally. The discipline Internal Medicine - Semiology asks for a lot of prerequisites in order to be fully understood. The same thing goes for a lot of other disciplines taught over the course of the year. That’s why you’ll have to use your time rationally and be able to find the perfect equilibrium between the effort you need in order to obtain knowledge, responsibilities and your personal lives. According to the requirements, each hour spent in contact with the teacher, the student should spend 1-2 hours working individually. That said, in order to be able to fulfill the requirements, 5 hours of weekly work should be allocated for studying Internal Medicine - Semiology.

Methods of evaluation:

The discipline Internal Medicine - Semiology includes 4 mid-terms and the observation sheets for the examined patients.
- Mid-term Nr. 1: Examination of patients with respiratory apparatus diseases;
- Mid-term Nr.2: Examination of patients with cardiovascular diseases;
- Mid-term Nr.3: Examination of patients with digestive system diseases;
- Mid-term Nr.4: Testing training maneuvers (all systems);

- Examination of patients with the completion of clinical observation sheets (End of semester 4).

Professional maneuvers sample test is performed by providing each student a patient. Students must perform a clinical examination of the patient i.e. history of the patient, a general inspection, touch probes etc. with a clinical interpretation of the obtained results, reflecting them through a correct formulation of the clinical syndromes in every particular case.

The discipline Internal Medicine - Semiology ends with a undifferentiated colloquium

A. Recommended References:

Obligatory:
1. Lectures
3. Stanciu C. Clinical examination. V.1. - Iasi, 2002

B. In addition: