UNIWERSYTET MEDYCZNY
IM. PIASTÓW ŚLĄSKICH WE WROCŁAWIU

Appendix 5
to Resolution No. 1630
of Senate of Wroclaw Medical University
of 30 March 2016

An optional subject in academic year 2017/2018			
Description of the course			
Module/Course	The new trends in laboratory diagnostic	**Group of detailed education results**	
		Group code E	**Group name** Clinical sciences
Faculty	**Medicine**		
Major	**medicine**		
Specialties	Not applicable		
Level of studies	Uniform magister studies **X** * 1st degree studies ☐ 2nd degree studies ☐ 3rd degree studies ☐ postgraduate studies ☐		
Form of studies	**X** full-time **X** part-time		
Year of studies	**III**	**Semester**	☐ Winter **X** Summer
Type of course	☐ obligatory ☐ limited choice **X** free choice / elective		
Course	☐ major ☐ basic		
Language of instruction	☐ Polish **X** English ☐ other		

* mark ☐ with an **X**

Number of hours

Form of education

Unit teaching the course	Lectures (L)	Seminars (SE)	Auditorium Classes (AC)	Major Classes – not clinical (MC)	Clinical Classes (CC)	Laboratory Classes (LC)	Classes in Simulated Conditions (CSC)	Practical Classes with Patient (PCP)	Specialist Classes – master studies (SCM)	Foreign Language Course (FLC)	Physical Education obligatory (PE)	Vocational Practice (VP)	Self-Study (Student's own work) (SS)	E-learning (EL)
Winter Semester:														
Summer Semester:														
Department of Medical Biochemistry		20												
TOTAL per year:														
Department of Medical Biochemistry		20												

Educational objectives (max. 6 items)

C1. Acquisition of the knowledge on principles of laboratory diagnostics.

C2. Acquaintance with the key problems of modern medicine not covered in the school

textbooks.
C3. Understanding the basic rules underlying the design of differential diagnosis with respect to chosen common diseases.
C4. Familiarity with the analysis and interpretation of the results of diagnostic tests.

Education result matrix for module/course in relation to verification methods of the intended education result and the type of class

Number of course education result	Number of major education result	Student who completes the module/course knows/is able to	Methods of verification of intended education results (forming and summarising)	Form of didactic class ***enter the abbreviation*
K 01	E.W3. d, e, f, g	Knows the principles of diagnosis of the most common internal diseases in children (with the application of appropriate laboratory tests): anemias, haemorrhagic diatheses, cancer diseases, vomiting, diarrhea, gastrointestinal bleeding, ulcers, hepatobiliary tract diseases, urinary tract infections, nephrolithiasis, kidney failure, nephritis, growth disturbances, thyroid and parathyroid glands diseases, adrenal gland diseases, diabetes, obesity	presentation, discussion, essey	SE
K 02	E.W7. a, b, c, d, e, f	Knows the principles of diagnosis of the most common internal diseases in adults (with the application of appropriate laboratory tests), including: cardiovascular diseases (e.g. myocardial ischemia, cardiac insufficiency), respiratory failure, gastrointestinal diseases, including hepatobiliary system dysfunction, endocrine dideases, including hypothalamus, pituitary, thyroid and parathyroid gland pathologies, dyslipidemia, metabolic syndrome, diabetes, urinary tract diseases, including kidney infection, hematopoietic system diseases, including haemorrhagic diathesis, acid-base balance disturbances , including acidosis, alkalosis	presentation, discussion, essey	SE
K 03	E.W24.	Knows the principles of the early diagnosis and screening tests in cancer diseases	presentation, discussion, essey	SE
K 04	E.W38.	Knows theoretical and practical basis of laboratory diagnostics	presentation, discussion, essey	SE

K 05	E.W39.	Knows and understands the options and constraints of laboratory tests in emergency	presentation, discussion, essey	SE
K 06	E.W40.	Knows indications for the administration of monitoring therapy.	presentation, discussion, essey	SE
S 01	**E.U12, 14, 15, 24**	Performs differential diagnosis of the most common diseases in adults and children Recognizes life-threatening states (on the basis of laboratory tests). Recognizes the state characteristic for alcohol and drugs of abuse intake (on the basis of laboratory tests results). Interprets the results of laboratory tests and identifies the reasons of deviations.	presentation, discussion, essey	SE

** L - lecture; SE - seminar; AC – auditorium classes; MC – major classes (non-clinical); CC – clinical classes; LC – laboratory classes; SCM – specialist classes (master studies); CSC – classes in simulated conditions; FLC – foreign language course; PCP practical classes with patient; PE – physical education (obligatory); VP – vocational practice; SS – self-study, EL – E-learning .

Please mark on scale 1-5 how the above effects place your classes in the following categories: communication of knowledge, skills or forming attitudes:
Knowledge: 5
Skills: 4

Student's amount of work (balance of ECTS points)

Student's workload (class participation, activity, preparation, etc.)	**Student Workload (h)**
1. Contact hours:	20
2. Student's own work (self-study):	6
Total student's workload	26
ECTS points for module/course	1
Comments	

Content of classes (please enter topic words of specific classes divided into their didactic form and remember how it is translated to intended educational effects)

Lectures
1.
2.

Seminars

1. Pathobiochemical backgrounds of civilization diseases.
2. The usefulness of laboratory data in the differential diagnosis of hemostatic failure.
3. The pros and cons of running a marathon - in the light of diagnostic tests.
4. Laboratory diagnostics in pregnancy. Age-dependent characteristics of laboratory tests.
5. The differential diagnosis of lipid metabolism disorders.
6. Plasma proteins and laboratory diagnosis of inflammation and infectious diseases.
7. Laboratory monitoring of dietary treatment.
8. The usefulness of laboratory data in the differential diagnosis of anemia.
9. The evaluation of water-electrolyte and acid-base balance in the clinical practice.
10. Laboratory tests in the diagnosis of hyperglycemia and hypoglycemia.

Basic literature (list according to importance, no more than 3 items)
1. Carl A. Burtis, Edward A. Ashwood "Tietz Fundamentals of Clinical Chemistry"

2. Thomas M. Devlin „Biochemistry with Clinical Correlations", Willey-Liss, New York

Additional literature and other materials (no more than 3 items)
Scientific literature on the problems addressed on the particular seminars

Didactic resources requirements (e.g. laboratory, multimedia projector, other…)
seminar rooms, multimedia projectors, computers, whiteboards.

Preliminary conditions (minimum requirements to be met by the student before starting the module/course)
Signing up for the seminars before they begin.

Conditions to receive credit for the course (specify the form and conditions of receiving credit for classes included in the module/course, admission terms to final theoretical or practical examination, its form and requirements to be med by the student to pass it and criteria for specific grades)

Students must attend all classes with regard to § 12 section 3 of the University Regulations. At the end of the course, the students present selected topics in the form of a presentation or an essay

Grade:	**Criteria** (only for courses/modules ending with an examination)
Very Good (5.0)	Not applicable
Above Good (4.5)	
Good (4.0)	
Sufficiently Good (3.5)	
Safficient (3.0)	

Name and address of module/course teaching unit, contact: telephone and e-mail address

Department of Medical Biochemistry, Chałubińskiego 10, 50-368 Wrocław
Secretarial office: e-mail: wl-4@umed.wroc.pl; phone: 784-13-70

Coordinator / Person responsible for module/course, contact: telephone and e-mail address

dr Iwona Bednarz-Misa ; phone: 784-13-77; iwona.bednarz-misa@umed.wroc.pl

List of persons conducting specific classes: full name, degree/scientific or professional title, discipline, performed profession, form of classes.

Teachers	Degree, field of science, profession	Form of classes
Iwona Bednarz-Misa	Doctor of Medical Sciences, Laboratory Diagnostician, Biochemist, adjunct	seminars

Izabela Berdowska	Doctor of Medical Sciences, Biochemist, adjunct	seminar
Ireneusz Ceremuga	Doctor of Medical Sciences, Biochemist, adjunct	seminars
Małgorzata Matusiewicz	Doctor of Medical Sciences, Biochemist, senior lecturer	seminar
Agnieszka Bronowicka-Szydełko	Doctor of Medical Sciences, Laboratory Diagnostician, Biochemist, adjunct	seminars
Paweł Serek	Doctor of Medical Sciences, Laboratory Diagnostician, assistant	seminars
Magdalena Mierzchała-Pasierb	Doctor of Medical Sciences, Biochemist, adjunct	seminar

Date of Syllabus development

12.06.2017

Syllabus developed by

.....Iwona Bednarz-Misa.....

Signature of Head of teaching unit

Uniwersytet Medyczny we Wrocławiu
KATEDRA I ZAKŁAD BIOCHEMII LEKARSKIEJ
Kierownik
prof. dr hab. Andrzej Gamian

Signature of Faculty Dean

Wrocław Medical University
FACULTY OF MEDICINE
VICE-DEAN FOR STUDIES IN ENGLISH
Prof. Andrzej Hendrich, PhD