

**Degree Programme in Biomedical Laboratory Science, Medisiina D, Kiinamylynkatu 10, Turku****Please note** these courses are only for Biomedical Laboratory Science exchange students

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<b>International Semester 2023</b>	<b>Spring</b>	<b>Autumn</b>	
<b>THEORY COURSES</b>	<b>ECTS</b>	<b>ECTS</b>	<b>Course no</b>
<b>PROFESSIONAL BASICS PRACTICE IN CLASSROOM SETTINGS, PRACTICE COURSES (TH00BN81) Please choose the labs you attend:</b>	<b>ECTS</b>	<b>ECTS</b>	
Clinical Biochemistry; automated analyzers	3	3	TH00BN80
Clinical Hematology (eLearning + labs)	2	2	TH00BN80
Clinical Immunohematology	1		TH00BN80
Blood sampling and Point-of-Care-Testing	1-2	1-2	TH00BN80
Clinical Pathology		2	TH00BN80
Clinical Microbiology	2		TH00BN80
Molecular genetics		3	TH00BN80
Clinical Physiology		1	TH00BN80
Project work; presentation or article; international student exchange	1	1	TH00BN80
Introduction to Biomedical Laboratory Scientist's profession in Hospital Laboratory ( <b>only for BLS students</b> )	1	1	TH00BN80
<b>Common courses for all Turku UAS exchange students</b>			
<b>Finnish for exchange students</b> Beginners' course for Finnish language. Available for all exchange students.	3	3	1000CG20 1000CG20
GetFinternational <a href="http://getfinternational.tuas.fi/">http://getfinternational.tuas.fi/</a> <b>Grading: 'pass'/'fail' (no numerical grade available for this course).</b>	3	3	1000393

## THEORY COURSES

### PRACTICE COURSES, PROFESSIONAL BASICS PRACTICE IN CLASSROOM SETTINGS (TH00BO81)

Students learn by working in learning laboratories following quality standards and safety laboratory practices.

#### **Clinical Biochemistry; automated analyzers 3 ECTS**

Students rehearse using automated analysers in clinical biochemistry and know how to apply their skills in the assessment of biochemical examination results, the errors dependent on the specimen and the reliable function of the analysers. Students know how to work according to the quality manual and the instructions in place. Students can identify the phases of pre-analytics, analytics and post-analytics in clinical biochemistry work.

#### **Clinical hematology I or II**

- Hematology I (Autum semester, 2 ECTS): Students can independently prepare a technically high-quality blood film and know mature, healthy blood cells. Students know how to work with microscopes independently.
- Hematology II (Spring semester, 2 ECTS): Students know immature blood cells and can assess the alterations which are seen in the blood count in connection with blood diseases. Students can identify findings in an aberrant blood film.

#### **Clinical immunohematology 1 ECTS**

Students know how to use the equipment for blood transfusion serology examinations and can under supervision carry out basic examinations in blood transfusion serology. Students know how to independently get results for blood type determination analyses.

#### **Blood Sampling and Point-of-Care-Testing 1-3 ECTS**

Student can independently carry out the specimen collection for different clinical specimens taking into account the requirements of pre-analytics and occupational safety. Student is able to answer for the safety and well-being of the client during the specimen collection. Student knows how to guide clients and take into account in their guidance the impact of pre-analytical factors on the results of the laboratory examinations. Student knows how to serve clients from other cultures. Student knows how to apply the principles of good service in customer work and in the collaboration with other professional groups.

#### **Clinical Pathology 2 ECTS**

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Students know the handling process of a histological specimen in the laboratory. Students master the tissue embedding technique, the tissue sectioning and the use of a microtome. Students are familiarised with immunohistochemical staining, they can identify the tissue components and know how to carry out histological and cytological staining and make a cytocentrifuge prepareate. Students can tell apart benign cell changes from normal findings.

### **Clinical microbiology I (1 ECTS) or II (2 ECTS)**

- Clinical microbiology I (Autumn semester, 1 ECTS): Students have the basic knowledge of the most common pathogenic microbes, know microbiological identification methods and know the microbiological instruments. Students know the basics of specimen collection for identifying microbes and know the correct procedure for obtaining a specimen from the larynx.
- Clinical microbiology II (Spring semester 2 ECTS): Students know how to obtain a high-quality specimen from the larynx, rehearse the use of microbe cultivation and identification methods and train their skills in interpreting the results.

### **Molecular Genetics 3 ECTS**

The student knows the factors affecting DNA and RNA isolation. The student is aware of the chromosomal structure, inheritance disturbances and disturbance factors. The student knows the most important methods of gene and chromosomal research.

### **Clinical Physiology 1 ECTS**

ECG registration.

### **Introduction to Biomedical Laboratory Scientist's profession in Finland 1 ECTS**

Students get familiar with the Biomedical Laboratory Scientist's career in Finland e.g. visiting the hospital laboratories.

### **Project work; Presentation or article, International Student Exchange 1 ECTS**

Students get familiar with giving a presentation/writing an article in English.

### **Finnish for exchange students 3 ECTS**

Beginner's course in Finnish language.

### **Get Finternational 3 ECTS**

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International students: gaining a wider perspective into the Finnish society, taking part in it more actively, learning how to analyse the adaptation to a foreign culture, learning how to interact with the representatives of different cultures. Finnish students: learning how to interact with the representatives of different cultures, being more confident in using foreign languages, analysing cross-cultural issues, gaining another perspective in one's own culture.