

**DEPARTMENT OF MEDICINE**  
**DEMOCRITUS UNIVERSITY OF THRACE**

**CONTENTS OF COMPULSORY COURSES**  
**OF UNDERGRADUATE STUDY PROGRAM**

**1<sup>st</sup> SEMESTER**

TITLE	TEACHING HOURS	ECTS
Biology	91	7.0
Biochemistry I	85	7.0
Histology-Embryology I	78	6.0
Information technology	72	5.0
English for Medicine I	52	3.0

**2<sup>nd</sup> SEMESTER**

TITLE	TEACHING HOURS	ECTS
Physiology I	56	3.0
Biochemistry II	85	6.0
Histology-Embryology II	78	5.0
Medical Physics	78	5.0
Genetics	85	6.0
English for Medicine II	52	3.0

**3<sup>rd</sup> SEMESTER**

TITLE	TEACHING HOURS	ECTS
Anatomy I	117	9.0
Physiology II	57	6.0
Hygiene	65	6.0
Medical Statistics	52	4.0
English for Medicine III	52	3.0

**4<sup>th</sup> SEMESTER**

TITLE	TEACHING HOURS	ECTS
Anatomy II	117	9.0
Physiology III	57	5.0
Pharmacology I	72	6.0
Social Medicine	52	5.0
English for Medicine IV	52	3.0

**5<sup>th</sup> SEMESTER**

TITLE	TEACHING HOURS	ECTS
Clinical Diagnosis	78	6.0
Pathophysiology I	52	4.0

General Pathology	65	5.0
Microbiology I	78	6.0
Pharmacology II	72	5.0

### 6<sup>th</sup> SEMESTER

TITLE	TEACHING HOURS	ECTS
Physical Signs in Clinical Surgery	104	7.0
Surgical Pathology	78	6.0
Pathophysiology II	52	4.0
Microbiology II	78	6.0
Dermatology	52	3.0

### 7<sup>th</sup> SEMESTER

TITLE	TEACHING HOURS	ECTS
Surgical Diagnosis and Treatment	78	6.0
Neurology	78	6.0
Radiology I	101	7.0
Otorhinolaryngology	47	3.0
Forensic medicine and Toxicology	52	3.0
Vascular Endovascular Surgery	39	3.0

### 8<sup>th</sup> SEMESTER

TITLE	TEACHING HOURS	ECTS
Pulmonology	52	4.0
Urology	47	4.0
Radiology II	101	7.0
Oncology	39	3.0
Internal Medicine I	104	8.0

### 9<sup>th</sup> SEMESTER

TITLE	TEACHING HOURS	ECTS
Trauma & Orthopaedics	91	6.0
Cardiology	78	5.0
Ophthalmology	39	3.0
Gynecology	51	4.0
Psychiatry	104	7.0
Cardiothoracic surgery	39	3.0

### 10<sup>th</sup> SEMESTER

TITLE	TEACHING HOURS	ECTS
Pediatrics	78	6.0
Obstetrics	51	4.0
Haematology	65	4.0
Nephrology	65	4.0
Anesthesiology	52	4.0
Critical Care Medicine	52	4.0

**11<sup>th</sup> – 12<sup>th</sup> SEMESTER**

TITLE	TEACHING WEEKS	ECTS
Internal Medicine II	12	20.0
Surgery	10	17.0
Paediatrics	6	10.0
Obstetrics and Gynecology	3	10.0
Neurology	3	3.0
Psychiatry	3	3.0

## COURSE OUTLINE

### 1 GENERAL

<b>SCHOOL</b>	SCHOOL OF HEALTH SCIENCES		
<b>DEPARTMENT</b>	DEPARTMENT OF MEDICINE		
<b>LEVEL OF STUDIES</b>	ISCED level 6 – Bachelor’s or equivalent level		
<b>COURSE CODE</b>		<b>SEMESTER</b>	1
<b>COURSE TITLE</b>	BIOLOGY		
<b>TEACHING ACTIVITIES</b> If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labsetc. If the ECTS Credits are awarded to the whole course, then please indicate theteaching hours per week and the corresponding ECTS Credits.		<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>
		7	7.0
<b>COURSE TYPE</b> Background, General Knowledge, Scientific Area, Skill Development	Background, Scientific Area		
<b>PREREQUISITES</b>	No		
<b>TEACHING &amp; EXAMINATION LANGUAGE:</b>	Greek		
<b>COURSE OFFERED TO ERASMUSSTUDENTS:</b>			
<b>COURSE URL:</b>			

### 2 LEARNING OUTCOMES

<p><b>Learning Outcomes</b> Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</p>
<p>The purpose of the course is to introduce Medical students to the basic concepts of Biology, emphasizing on the molecular mechanisms that govern the organization and function of the cell. The interactions of the cell with its environment within the context of complex organisms are examined and behavioral biology issues are approached.</p> <p>The learning objectives of the course include:</p> <ul style="list-style-type: none"> <li>Understanding the basic mechanisms of life at the cellular and molecular level.</li> <li>The recognition of basic cellular functions in practice</li> <li>The understanding of the cell's functioning mechanisms and their connection with the application to health.</li> <li>Getting to know basic biotechnology methods and practicing them.</li> <li>The introduction to newer technologies</li> </ul>

<p><b>General Skills</b></p> <p>Name the desirable general skills upon successful completion of the module</p>
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Search, analysis and synthesis of data and information, ICT Use, Adaptation to new situations, Decision making, Autonomous work, Teamwork, Working in an international environment, Working in an interdisciplinary environment, Production of new research ideas  
Project design and management Equity and Inclusion, Respect for the natural environment, Sustainability, Demonstration of social, professional and moral responsibility and sensitivity to gender issues, Critical thinking, Promoting free, creative and inductive reasoning

Upon successful completion of the course, students' ability to:  
Communicate effectively in a medical setting.  
They apply scientific principles, methods and knowledge to medical practice and research.

### 3 COURSE CONTENT

Unit 1. Cell and Cell Organelles: Size and Shape – Principles of Microscopy – Prokaryotic and eukaryotic cells – Animal and plant cells – Model organisms – Plasma membrane – Nucleus – Ribosomes – Endoplasmic reticulum – Golgi system – Lysosomes - Peroxisomes - Mitochondria  
Unit 2. Macromolecules - Structure and function of Proteins: Fatty acids - Sugars - Amino acids - Active carrier molecules - Shape and structure of proteins - Levels of protein organization -  $\alpha$ -helix -  $\beta$ -fold sheet - Biological catalysis -Function of proteins: Linking with other molecules, Catalytic action of of enzymes and its regulation - Activated molecules - carriers - Allosteric enzymes - Degradation proteins  
Unit 3. Biomembranes and transport: Structure of membranes – Membrane proteins – Membrane transport: Diffusion – Osmosis – Assisted diffusion – Active transport -  $\text{Na}^+$ ,  $\text{K}^+$ ,  $\text{Ca}^+$  pumps - Ion channels and membrane potential - Ion channels and nerves cells - Endocytosis - Exocytosis  
Unit 4. Nucleic acids - Chromatin - Gene regulation: A) Structure of eukaryotes of chromosomes – Euchromatin – Heterochromatin - Organization of genes. B) DNA as a carrier heredity - Structure and function of DNA - Copying DNA - Repairing DNA - DNA recombination - Transcription - RNA maturation - Genetic code - Translation - Ribozymes. C) Gene regulation – Molecular switches – Differentiation – Developmental biology – Epigenetics: RNA interference, DNA methylation  
Unit 5. Cell Cycle - Cell Death: Cell Cycle – Cell Cycle Control – Kinases - Cell death – Apoptosis - Cell division, cytokinesis  
Unit 6. Cell communication: General principles of cell signaling – Receptors - G-Proteins – Enzyme-linked receptors – Intracellular signaling sequences  
Unit 7. Cytoskeleton Microtubules, Actin filaments, Intermediate fibrils – Muscle contraction  
Unit 8. Intracellular Compartments and Transport: Protein Sorting – Transport by Vesicles – Pathways of secretion – Pathways of endocytosis  
Unit 9. Procellular and Prokaryotic Organisms: Structure of Viruses - Life Cycle and Genetics bacteriophages - Lytic cycle - Lysogenic cycle - Life cycle and genetics of retroviruses - Transposables facts - Genetics of bacteria  
Unit 10. Energy production in mitochondria and chloroplasts: Mitochondria and oxidative phosphorylation - Electron transport chains - Chloroplasts and photosynthesis  
Unit 11. DNA Technology: Cell Cultures - DNA Analysis Techniques - Hybridization - Cloning – Polymerase chain reaction - Genetic engineering – Microarrays  
Unit 12. Immune System: Cellular & Molecular Basis of Immune Responses: Non-specific - Specific immune response, Cells and immune response, Immune memory, Structure and Function of antibodies – Molecular basis of antibody diversity – Major complex histocompatibility  
Unit 13. Tissues and Cancer: Intercellular Junctions – Stem Cells - Cancer

#### 4 LEARNING & TEACHING METHODS - EVALUATION

<b>TEACHING METHOD</b> Face to face, Distance learning, etc.	Face to face														
<b>USE OF INFORMATION &amp; COMMUNICATIONS TECHNOLOGY (ICT)</b> Use of ICT in Teaching, in Laboratory Education, in Communication with students	Use of ICT in Teaching Use of ICT in Laboratory Education Use of ICT in Communication with students														
<b>TEACHING ORGANIZATION</b> The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study/creation, project, creation, project. Etc.  The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards	<table border="1" data-bbox="858 521 1406 949"> <thead> <tr> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>65</td> </tr> <tr> <td>Tutoring</td> <td>8</td> </tr> <tr> <td>Laboratory Exercise</td> <td>17</td> </tr> <tr> <td>Bibliographic research &amp; analysis</td> <td>100</td> </tr> <tr> <td>Essay</td> <td>20</td> </tr> <tr> <td><b>Total</b></td> <td><b>210</b></td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	65	Tutoring	8	Laboratory Exercise	17	Bibliographic research & analysis	100	Essay	20	<b>Total</b>	<b>210</b>
Activity	Workload/semester														
Lectures	65														
Tutoring	8														
Laboratory Exercise	17														
Bibliographic research & analysis	100														
Essay	20														
<b>Total</b>	<b>210</b>														

<b>STUDENT EVALUATION</b> Description of the evaluation process  Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay/Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others  Please indicate all relevant information about the course assessment and how students are informed	<b>Student evaluation languages</b> Greek  <b>Method (Formative or Concluding)</b> Formative  <table border="1" data-bbox="810 1245 1465 1552"> <thead> <tr> <th>Student evaluation methods</th> <th>Percent</th> </tr> </thead> <tbody> <tr> <td>Written exam with multiple choice test</td> <td>70</td> </tr> <tr> <td>Written exam with short answer questions</td> <td>10</td> </tr> <tr> <td>Laboratory report</td> <td>20</td> </tr> </tbody> </table>	Student evaluation methods	Percent	Written exam with multiple choice test	70	Written exam with short answer questions	10	Laboratory report	20
Student evaluation methods	Percent								
Written exam with multiple choice test	70								
Written exam with short answer questions	10								
Laboratory report	20								

#### 5 Suggested Bibliography

1. Molecular Biology of the Cell 6th Edition by Bruce Alberts
2. The Cell: A Molecular Approach 8th Edition by Geoffrey Cooper

## COURSE OUTLINE

### 1 GENERAL

<b>SCHOOL</b>	SCHOOL OF HEALTH SCIENCES		
<b>DEPARTMENT</b>	DEPARTMENT OF MEDICINE		
<b>LEVEL OF STUDIES</b>	ISCED level 6 – Bachelor's or equivalent level		
<b>COURSE CODE</b>		<b>SEMESTER</b>	1
<b>COURSE TITLE</b>	BIOCHEMISTRY I		
<b>TEACHING ACTIVITIES</b> If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labsetc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.		<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>
		6,5	7.0
<b>COURSE TYPE</b> Background, General Knowledge, Scientific Area, Skill Development	Background		
<b>PREREQUISITES</b>	No		
<b>TEACHING &amp; EXAMINATION LANGUAGE:</b>	Greek		
<b>COURSE OFFERED TO ERASMUS STUDENTS:</b>			
<b>COURSE URL:</b>			

### 2 LEARNING OUTCOMES

<p><b>Learning Outcomes</b> Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</p>
<p>Upon successful completion of the course, the student will be able to: Understand the molecular basis of function of enzymes and proteins. Understand how biochemical techniques are used in the determination and evaluation of laboratory tests on biological fluids. Understand the molecular basis of some diseases.</p>

<p><b>General Skills</b> Name the desirable general skills upon successful completion of the module</p> <p>Search, analysis and synthesis of data and information, ICT Use, Adaptation to new situations, Decision making, Autonomous work, Teamwork, Working in an international environment, Working in an interdisciplinary environment, Production of new research ideas Project design and management Equity and Inclusion, Respect for the natural environment, Sustainability, Demonstration</p>
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of social, professional and moral responsibility and sensitivity to gender issues, Critical thinking, Promoting free, creative and inductive reasoning

Search, analysis and synthesis of data and information.  
Critical thinking.  
Promoting free, creative and inductive reasoning

### 3 COURSE CONTENT

Introduction

Classification of organic compounds.

-Homologous series, Aromatic character, Stereochemistry, Isomers. Chemical bonds and forces between atoms and molecules.

Factors affecting the rate of chemical reactions. Spectroscopic methods. Concepts of Concentration - Molarity - Solutions.

Acids - bases according to Arrhenius, Bronsted-Lowry, Lewis.

Water dissociation, pH.

Buffers.

Thermodynamics.

Kinetics of chemical reactions.

Amino acids -Structure and properties.

Proteins

-Primary, secondary, tertiary, quaternary structure.

-Forces involved in the formation of protein structures.

- Denaturation of proteins.

-Experimental determination of protein structures.

- X-ray crystallography, NMR, Machine learning Protein function

-Hemoglobin. Structure and function. Effect of 2,3-BPG. Bohr effect. -Allosteric effect, Symmetrical and sequential pattern.

Protein purification and identification -Differential centrifugation.

-Solubility of proteins.

-Chromatography.

- Molecular filtration, Ion exchange, Affinity chromatography, HPLC. -Electrophoresis.

-Isoelectric focusing, 2D electrophoresis.

-Antibodies - Immunological methods.

- Polyclonal - Monoclonal antibodies, ELISA, Western blot.

-Mass spectroscopy.

- Determination of amino acid composition.

Determination of amino acid sequence.

-Specific cleavage of polypeptides, Separation of polypeptide chains, Synthesis of peptides. -Information we can get from the structure of a protein.

-Protein purification.

Enzymes

-Properties of enzymes.

-Nomenclature of enzymes.

-Thermodynamics of enzymes.

-Active center of enzymes.

- Michaelis-Menten kinetics -  $K_M$ ,  $V_{max}$ ,  $K_{cat}/K_M$  -Lineweaver-Burk equation.

-Reactions with many substrates.

-Allosteric enzymes.

-Other factors affecting enzyme activity.

Enzyme inhibition.

-Reversible, Irreversible. Competitive, Non-competitive, Mixed, Non-competitive. Regulation of enzyme activity.

-Compartmentalization.

-Multienzyme systems.

- Proteolytic activation.
- Covalent modification.
- Isozymes.
- Allosteric modification.
- Proteolytic regulation.

#### 4 LEARNING & TEACHING METHODS - EVALUATION

<b>TEACHING METHOD</b> Face to face, Distance learning, etc.	Face to face												
<b>USE OF INFORMATION &amp; COMMUNICATIONS TECHNOLOGY (ICT)</b> Use of ICT in Teaching, in Laboratory Education, in Communication with students	Use of ICT in Teaching Use of ICT in Laboratory Education Use of ICT in Communication with students												
<b>TEACHING ORGANIZATION</b> The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study/creation, project, creation, project. Etc.  The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards	<table border="1"> <thead> <tr> <th style="background-color: #d9ead3;">Activity</th> <th style="background-color: #d9ead3;">Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>65</td> </tr> <tr> <td>Laboratory Exercise</td> <td>20</td> </tr> <tr> <td>Tutoring</td> <td>32</td> </tr> <tr> <td>Bibliographic research &amp; analysis</td> <td>70</td> </tr> <tr> <td><b>Total</b></td> <td><b>175</b></td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	65	Laboratory Exercise	20	Tutoring	32	Bibliographic research & analysis	70	<b>Total</b>	<b>175</b>
Activity	Workload/semester												
Lectures	65												
Laboratory Exercise	20												
Tutoring	32												
Bibliographic research & analysis	70												
<b>Total</b>	<b>175</b>												

<b>STUDENT EVALUATION</b> Description of the evaluation process  Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay/Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others  Please indicate all relevant information about the course assessment and how students are informed	<p><b>Student evaluation languages</b> Greek</p> <p><b>Method (Formative or Concluding)</b> Formative</p> <table border="1"> <thead> <tr> <th style="background-color: #d9ead3;">Student evaluation methods</th> <th style="background-color: #d9ead3;">Percent</th> </tr> </thead> <tbody> <tr> <td>Written exam with multiple choice test</td> <td>33</td> </tr> <tr> <td>Written exam with essay answer questions</td> <td>33</td> </tr> <tr> <td>Written exam with short answer questions</td> <td>33</td> </tr> </tbody> </table>	Student evaluation methods	Percent	Written exam with multiple choice test	33	Written exam with essay answer questions	33	Written exam with short answer questions	33
Student evaluation methods	Percent								
Written exam with multiple choice test	33								
Written exam with essay answer questions	33								
Written exam with short answer questions	33								

#### 5 Suggested Bibliography

Biochemistry, by Jeremy M. Berg, John L. Tymoczko, Gregory J. Gatto Jr., Lubert Stryer.  
Biochemistry, by Donald Voet, Judith G. Voet

## COURSE OUTLINE

### 1 GENERAL

<b>SCHOOL</b>	SCHOOL OF HEALTH SCIENCES		
<b>DEPARTMENT</b>	DEPARTMENT OF MEDICINE		
<b>LEVEL OF STUDIES</b>	ISCED level 6 – Bachelor’s or equivalent level		
<b>COURSE CODE</b>		<b>SEMESTER</b>	1
<b>COURSE TITLE</b>	HISTOLOGY -EMBRYOLOGY I		
<b>TEACHING ACTIVITIES</b> If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labsetc. If the ECTS Credits are awarded to the whole course, then please indicate theteaching hours per week and the corresponding ECTS Credits.		<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>
		6	6.0
<b>COURSE TYPE</b> Background, General Knowledge, Scientific Area, Skill Development	Scientific Area		
<b>PREREQUISITES</b>	No		
<b>TEACHING &amp; EXAMINATION LANGUAGE:</b>	Greek		
<b>COURSE OFFERED TO ERASMUSSTUDENTS:</b>			
<b>COURSE URL:</b>			

### 2 LEARNING OUTCOMES

<b>Learning Outcomes</b> Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.
This course is designed to induce the thorough understanding and knowledge of the structure of cells composing the human body, as well as the organs’ and systems’ formation. The early embryonic development is also analytically presented.

<b>General Skills</b> Name the desirable general skills upon successful completion of the module  Search, analysis and synthesis of data and information, ICT Use, Adaptation to new situations, Decision making, Autonomous work, Teamwork, Working in an international environment, Working in an interdisciplinary environment, Production of new research ideas Project design and management Equity and Inclusion, Respect for the natural environment, Sustainability, Demonstration
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of social, professional and moral responsibility and sensitivity to gender issues, Critical thinking, Promoting free, creative and inductive reasoning

Search, analysis and synthesis of data and information

ICT Use,

Adaptation to new situations

Decision making

Working in an interdisciplinary environment

Equity and Inclusion

Demonstration of social, professional and moral responsibility and sensitivity to gender issues

Critical thinking

Promoting free, creative and inductive reasoning

Apply scientific principles, methods and knowledge to medical practice and research

### 3 COURSE CONTENT

In theory:

General Part of Histology

1. Methods of tissue Study
2. Histochemistry, Immunohistochemistry and Cytochemistry
3. Cell (functions and components)
4. Epithelial Tissue (general characteristics of epithelial tissue, specialization of the apical surface of epithelia, classification of epithelia, general biology of epithelial tissue, biology of the main epithelial cell types)
5. Connective Tissue (structure and types)
6. Adipose tissue (structure and types)
7. Cartilage Tissue (structure and types)
8. Osteitis Tissue (structure and types, histogenesis)
9. Nervous Tissue (structure and development of nervous tissue, synapses, glia, nerve fibers, nerves, autonomic nervous system, ganglia, gray and white matter, meninges, choroid plexus, cerebrospinal fluid)
10. Muscle tissue (structure and types)
11. Circulatory System (general and specific structure of blood vessels)
12. Blood Cells
13. Hematopoiesis (bone marrow components, maturation)
14. Lymphatic System (immune system, thymus, lymph nodes, spleen, MALT)

General Part of Embryology

1. Gametogenesis
2. From ovulation to implantation (first week of development)
3. The two-layer germ disc (second week of development)
4. The three-layer germ disc (third week of development)
5. The early fetal period (from the third to the eighth week)
6. The late fetal period (from the third month until birth)
7. The fetal membranes and the placenta

In practice:

1. Practical exercise in tissue study methods. Histochemistry, Immunohistochemistry and Cytochemistry. Microscopy of the basic tissues of the human body according to the theoretical part
2. Epithelial tissue
3. Connective tissue
4. Adipose tissue
5. Cartilage Tissue
6. Osteitis

7. Nervous Tissue.
8. Muscle Tissue
9. Circulatory System (general and specific structure of blood vessels)
10. Blood Cells
11. Lymphatic System (thymus, lymph nodes, spleen)
12. Placenta, fetal membranes, umbilical cord and fetus during the early fetal period

#### 4 LEARNING & TEACHING METHODS - EVALUATION

<b>TEACHING METHOD</b> Face to face, Distance learning, etc.	Face to face												
<b>USE OF INFORMATION &amp; COMMUNICATIONS TECHNOLOGY (ICT)</b> Use of ICT in Teaching, in Laboratory Education, in Communication with students	Use of ICT in Teaching Use of ICT in Laboratory Education Use of ICT in Communication with students												
<b>TEACHING ORGANIZATION</b> The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study/creation, project, creation, project. Etc.  The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards	<table border="1"> <thead> <tr> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>65</td> </tr> <tr> <td>Laboratory Exercise</td> <td>13</td> </tr> <tr> <td>Bibliographic research &amp; analysis</td> <td>43</td> </tr> <tr> <td>Project</td> <td>35</td> </tr> <tr> <td><b>Total</b></td> <td><b>156</b></td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	65	Laboratory Exercise	13	Bibliographic research & analysis	43	Project	35	<b>Total</b>	<b>156</b>
Activity	Workload/semester												
Lectures	65												
Laboratory Exercise	13												
Bibliographic research & analysis	43												
Project	35												
<b>Total</b>	<b>156</b>												

<b>STUDENT EVALUATION</b> Description of the evaluation process  Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay/Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others  Please indicate all relevant information about the course assessment and how students are informed	<b>Student evaluation languages</b> Greek  <b>Method (Formative or Concluding)</b> Formative  <table border="1"> <thead> <tr> <th>Student evaluation methods</th> <th>Percent</th> </tr> </thead> <tbody> <tr> <td>Written exam with multiple choice test</td> <td>100</td> </tr> </tbody> </table>	Student evaluation methods	Percent	Written exam with multiple choice test	100
Student evaluation methods	Percent				
Written exam with multiple choice test	100				

#### 5 Suggested Bibliography

1. The Developing Human: Clinically Oriented Embryology, 10th Edition by Keith L. Moore, T. V. N. Persaud and Mark G. Torchia. ISBN:978-0-323-31338-4, 2016, Elsevier Inc.
2. Histology - An Essential Textbook, 1st Edition by D. J. Lowrie, Jr. ISBN: 978-1626234130, 2020, Thieme.
3. Textbook of Histology, 4th Edition by Leslie P. Gartner. ISBN: 978-0323355636, 2016, Elsevier Inc.
4. Human Embryology and developmental biology, Bruce M. Carlson, 6<sup>th</sup> edition, ISBN: 978-0-323-52375-2 2019, Elsevier Inc.

## COURSE OUTLINE

### 1 GENERAL

<b>SCHOOL</b>	SCHOOL OF HEALTH SCIENCES		
<b>DEPARTMENT</b>	DEPARTMENT OF MEDICINE		
<b>LEVEL OF STUDIES</b>	ISCED level 6 – Bachelor’s or equivalent level		
<b>COURSE CODE</b>		<b>SEMESTER</b>	1
<b>COURSE TITLE</b>	INFORMATION TECHNOLOGY		
<b>TEACHING ACTIVITIES</b> If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labsetc. If the ECTS Credits are awarded to the whole course, then please indicate theteaching hours per week and the corresponding ECTS Credits.		<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>
		5,5	5.0
<b>COURSE TYPE</b> Background, General Knowledge, Scientific Area, Skill Development	General Knowledge		
<b>PREREQUISITES</b>	No		
<b>TEACHING &amp; EXAMINATION LANGUAGE:</b>	Greek		
<b>COURSE OFFERED TO ERASMUSSTUDENTS:</b>			
<b>COURSE URL:</b>			

### 2 LEARNING OUTCOMES

<p><b>Learning Outcomes</b> Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</p>
<p>Upon successful completion of the course, the student will be able to:</p> <ul style="list-style-type: none"> <li>– Has basic IT knowledge, and can use word processing programs, spreadsheets, presentations.</li> <li>– Designs and builds medical databases.</li> <li>– Has basic knowledge of programming in GNU-octave environment</li> <li>– Can do digital medical image processing.</li> </ul>

<p><b>General Skills</b></p> <p>Name the desirable general skills upon successful completion of the module</p> <p>Search, analysis and synthesis of data and information, ICT Use, Adaptation to new situations, Decision making, Autonomous work, Teamwork, Working in an international environment, Working in an interdisciplinary environment, Production of new research ideas Project design and management Equity and Inclusion, Respect for the natural environment, Sustainability, Demonstration</p>
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of social, professional and moral responsibility and sensitivity to gender issues, Critical thinking, Promoting free, creative and inductive reasoning

Search, analysis and synthesis of data and information  
 ICT Use  
 Adaptation to new situations  
 Decision making  
 Working in an interdisciplinary environment  
 Equity and Inclusion  
 Demonstration of social, professional and moral responsibility and sensitivity to gender issues  
 Critical thinking  
 Promoting free, creative and inductive reasoning  
 Communicate effectively in a medical environment  
 Apply scientific principles, methods and knowledge to medical practice and research

### 3 COURSE CONTENT

The curriculum of the Informatics course is as follows:

- Informatics in Medicine.
- Description of PC hardware and software.
- Operating systems: MS Windows, Linux.
- Fundamentals of programming languages.
- Word processing, spreadsheet management, presentation creation, medical database creation and management.
- Artificial intelligence in Medicine, neural networks, genetic algorithms.
- Medical image processing, histogram transformations, spatial transformations, filtering with the help of transfer functions.

### 4 LEARNING & TEACHING METHODS - EVALUATION

<b>TEACHING METHOD</b> Face to face, Distance learning, etc.	Face to face														
<b>USE OF INFORMATION &amp; COMMUNICATIONS TECHNOLOGY (ICT)</b> Use of ICT in Teaching, in Laboratory Education, in Communication with students	Use of ICT in Teaching Use of ICT in Laboratory Education Use of ICT in Communication with students														
<b>TEACHING ORGANIZATION</b> The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study/creation, project, creation, project. Etc.  The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards	<table border="1"> <thead> <tr> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>46</td> </tr> <tr> <td>Workshop</td> <td>26</td> </tr> <tr> <td>Bibliographic research &amp; analysis</td> <td>40</td> </tr> <tr> <td>Project</td> <td>15</td> </tr> <tr> <td>Creation</td> <td>15</td> </tr> <tr> <td><b>Total</b></td> <td><b>142</b></td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	46	Workshop	26	Bibliographic research & analysis	40	Project	15	Creation	15	<b>Total</b>	<b>142</b>
Activity	Workload/semester														
Lectures	46														
Workshop	26														
Bibliographic research & analysis	40														
Project	15														
Creation	15														
<b>Total</b>	<b>142</b>														

<b>STUDENT EVALUATION</b> Description of the evaluation process  Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay/Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others  Please indicate all relevant information about the course assessment and how students are informed	<b>Student evaluation languages</b> Greek  <b>Method (Formative or Concluding)</b> Formative  <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="background-color: #e0e0e0;">Student evaluation methods</th> <th style="background-color: #e0e0e0;">Percent</th> </tr> </thead> <tbody> <tr> <td>Written exam with multiple choice test</td> <td style="text-align: center;">90</td> </tr> <tr> <td>Essay</td> <td style="text-align: center;">10</td> </tr> </tbody> </table>	Student evaluation methods	Percent	Written exam with multiple choice test	90	Essay	10
Student evaluation methods	Percent						
Written exam with multiple choice test	90						
Essay	10						

## 5 Suggested Bibliography

M. Glava , 7 in 1 Windows 8 - Office 2013: STEP BY STEP, Edition: 1/2014,

## COURSE OUTLINE

### 1 GENERAL

<b>SCHOOL</b>	SCHOOL OF HEALTH SCIENCES		
<b>DEPARTMENT</b>	DEPARTMENT OF MEDICINE		
<b>LEVEL OF STUDIES</b>	ISCED level 6 – Bachelor’s or equivalent level		
<b>COURSE CODE</b>		<b>SEMESTER</b>	1
<b>COURSE TITLE</b>	ENGLISH FOR MEDICINE I		
<b>TEACHING ACTIVITIES</b> If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labsetc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.	<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>	
	4	3.0	

<b>COURSETYPE</b> Background, General Knowledge, Scientific Area, Skill Development	Background
<b>PREREQUISITES</b>	No
<b>TEACHING &amp; EXAMINATION LANGUAGE:</b>	English
<b>COURSE OFFERED TO ERASMUSSTUDENTS:</b>	
<b>COURSE URL:</b>	

## 2 LEARNING OUTCOMES

### Learning Outcomes

Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.

After the successful completion of the course, students will:

- be able to identify word parts in medical terms
- know how to build medical terms
- know how to break down medical terms into word components and define each component
- have been familiarized with a great number of terms related to medicine
- have improved academic skills such as notetaking and effective delivery of oral presentations
- have developed oral communication skills and will be able to contribute effectively in discussions

### General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information, ICT Use, Adaptation to new situations, Decision making, Autonomous work, Teamwork, Working in an international environment, Working in an interdisciplinary environment, Production of new research ideas

Project design and management Equity and Inclusion, Respect for the natural environment, Sustainability, Demonstration of social, professional and moral responsibility and sensitivity to gender issues, Critical thinking, Promoting free, creative and inductive reasoning

Search, analysis and synthesis of data and information  
Autonomous work  
Teamwork  
Working in an international environment  
Adaptation to new situations  
Decision making  
Critical thinking  
Promoting free, creative and inductive reasoning  
Equity and Inclusion  
Demonstration of social, professional and moral responsibility and sensitivity to gender issues

## 3 COURSE CONTENT

- The Building Blocks of Medical Terminology
  - Introduction to Medical Terminology

- Word Parts
  - Roots and Combining Forms
  - Suffixes
  - Prefixes
- Formation of Medical Terms
  - Guidelines for Medical Term Formation
  - Deciphering the Meaning of Medical Terms
- Spelling - Pronunciation
- Singular and Plural Forms
  - Greek Singular and Plural Forms
  - Latin Singular and Plural Forms
  - Irregular Latin Plural Forms
- Body Structure and Anatomical Terms of Location
  - Cells
  - Tissues
  - Organs
  - Body Systems
  - The External Parts of the Body
  - Surface Anatomy
  - Body Cavities
  - Abdominal Regions - Abdominal Quadrants
  - Anatomical Position and Body Planes
  - Anatomical Terms of Location
- The History of Medicine – A Journey through Ancient Greek Medicine
- Basic Hospital Vocabulary
  - Hospital Departments
  - Hospital Personnel
  - Instruments and Equipment
- Types of Diseases
- Chemical Elements and Compounds
- Microscopy as a Form of Art
- Idiomatic Expressions
- Mythonyms

#### 4 LEARNING & TEACHING METHODS - EVALUATION

<b>TEACHING METHOD</b> Face to face, Distance learning, etc.	Face to face
<b>USE OF INFORMATION &amp; COMMUNICATIONS TECHNOLOGY (ICT)</b> Use of ICT in Teaching, in Laboratory Education, in Communication with students	Use of ICT in Teaching Use of ICT in Communication with students

**TEACHING ORGANIZATION**

The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study/creation, project, creation, project. Etc.

The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards

Activity	Workload/semester
Bibliographic research & analysis	26
Speaking, listening & writing activities	26
Research Project	18
Study	20
<b>Total</b>	<b>90</b>

**STUDENT EVALUATION**

Description of the evaluation process

Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay/Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others

Please indicate all relevant information about the course assessment and how students are informed

**Student evaluation languages**

English

**Method (Formative or Concluding)**

Formative

Student evaluation methods	Percent
multiple choice test	20
short answer questions	20
matching exercise	20
cloze test	20
true/false questions	20

**5 Suggested Bibliography**

- Θεόνη Καβουρά, Ελένη Ναλμπάντη, Focus on the Language of Medicine in Health Sciences, Ιωάννης Κωνσταντάρας, 2022
- Γεώργιος Μιχαηλίδης, Νέλλη Βέζου-Μαγκούτη, Αγγλοελληνικό Ελληνοαγγλικό Λεξικό των Ιατρικών Όρων, Ιωάννης Κωνσταντάρας, 2005

## COURSE OUTLINE

### 1 GENERAL

<b>SCHOOL</b>	SCHOOL OF HEALTH SCIENCES		
<b>DEPARTMENT</b>	DEPARTMENT OF MEDICINE		
<b>LEVEL OF STUDIES</b>	ISCED level 6 – Bachelor's or equivalent level		
<b>COURSE CODE</b>		<b>SEMESTER</b>	2
<b>COURSE TITLE</b>	PHYSIOLOGY I		
<b>TEACHING ACTIVITIES</b> If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labsetc. If the ECTS Credits are awarded to the whole course, then please indicate theteaching hours per week and the corresponding ECTS Credits.	<b>TEACHING HOURS PER WEEK</b>		<b>ECTS CREDITS</b>
	4		3.0
<b>COURSE TYPE</b> Background, General Knowledge,Scientific Area, Skill Development	Scientific Area		
<b>PREREQUISITES</b>	No		
<b>TEACHING &amp; EXAMINATION LANGUAGE:</b>	Greek		
<b>COURSE OFFERED TO ERASMUSSTUDENTS:</b>			
<b>COURSE URL:</b>			

### 2 LEARNING OUTCOMES

<p><b>Learning Outcomes</b> Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</p>
<p>Upon successful completion of the course the student will be able to:</p> <ul style="list-style-type: none"> <li>- Know the normal function of cells with particular emphasis on nerve and muscle cells</li> <li>-Know the composition, origin and function of blood</li> <li>- Know the parts and basic functions of the immune system</li> <li>-Know the basic mechanisms of metabolism regulation</li> <li>-Know the basic mechanisms of body temperature regulation</li> </ul>

<p><b>General Skills</b></p> <p>Name the desirable general skills upon successful completion of the module</p> <p>Search, analysis and synthesis of data and information, ICT Use, Adaptation to new situations, Decision making, Autonomous work, Teamwork, Working in an international environment, Working in an interdisciplinary environment,</p>
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Production of new research ideas  
 Project design and management Equity and Inclusion, Respect for the natural environment, Sustainability, Demonstration of social, professional and moral responsibility and sensitivity to gender issues, Critical thinking, Promoting free, creative and inductive reasoning

Search, analysis and synthesis of data and information  
 Decision making  
 Autonomous work  
 Teamwork  
 Project design  
 Critical thinking,  
 Promoting free, creative and inductive reasoning

### 3 COURSE CONTENT

- Introduction to the basic concepts governing the physiology of the human body with emphasis on the function of nerve and muscle cells
- Physiology of blood
- Study of the immune system
- Basic mechanisms of regulation of metabolism and body temperature.

### 4 LEARNING & TEACHING METHODS - EVALUATION

<b>TEACHING METHOD</b> Face to face, Distance learning, etc.	Face to face Distance Learning (when applicable)										
<b>USE OF INFORMATION &amp; COMMUNICATIONS TECHNOLOGY (ICT)</b> Use of ICT in Teaching, in Laboratory Education, in Communication with students	Use of ICT in Teaching Use of ITC in Laboratory Education Use of ICT in Communication with students										
<b>TEACHING ORGANIZATION</b> The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study/creation, project, creation, project. Etc.  The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards	<table border="1" data-bbox="837 1361 1428 1635"> <thead> <tr> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>52</td> </tr> <tr> <td>Laboratory Exercises</td> <td>10</td> </tr> <tr> <td>Study, Bibliographic research and analysis</td> <td>28</td> </tr> <tr> <td><b>Total</b></td> <td><b>90</b></td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	52	Laboratory Exercises	10	Study, Bibliographic research and analysis	28	<b>Total</b>	<b>90</b>
Activity	Workload/semester										
Lectures	52										
Laboratory Exercises	10										
Study, Bibliographic research and analysis	28										
<b>Total</b>	<b>90</b>										
<b>STUDENT EVALUATION</b> Description of the evaluation process	<b>Student evaluation languages</b> English										

Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay/Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others

Please indicate all relevant information about the course assessment and how students are informed

**Method (Formative or Concluding)**

Formative

Student evaluation methods	Percent
Written exam with multiple choice test	20
Oral exam	80

**5 Suggested Bibliography**

- PowerPoint presentations (e-class)
- Relevant bibliography from PubMed and other websites presented and renewed annually
- Suggested books:
  1. Human Physiology: An Integrated Approach, 8th edition, Dee Unglaub Silverthorn University of Texas, Austin, Published by Pearson (January 3rd 2018) - Copyright © 2019, ISBN 9781292259543
  2. Introduction to Human Physiology, Lauralee Sherwood, 8<sup>th</sup> edition, 2017, Brooks/COLE, Cengage Learning, ISBN 9781133104544
  3. Medical Physiology, W. Boron & E. Boulpaep, 3<sup>rd</sup> Edition, 2017, Elsevier, ISBN 9781455743773
  4. Physiology, L. Costanzo, 6<sup>th</sup> edition, 2018, Elsevier, ISBN 9780323478816

**COURSE OUTLINE**

**1 GENERAL**

<b>SCHOOL</b>	SCHOOL OF HEALTH SCIENCES		
<b>DEPARTMENT</b>	DEPARTMENT OF MEDICINE		
<b>LEVEL OF STUDIES</b>	ISCED level 6 – Bachelor’s or equivalent level		
<b>COURSE CODE</b>		<b>SEMESTER</b>	2
<b>COURSE TITLE</b>	BIOCHEMISTRY II		

<b>TEACHING ACTIVITIES</b> If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labsetc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.		<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>
		6,5	6.0
<b>COURSE TYPE</b> Background, General Knowledge, Scientific Area, Skill Development	Background		
<b>PREREQUISITES</b>	No		
<b>TEACHING &amp; EXAMINATION LANGUAGE:</b>	Greek		
<b>COURSE OFFERED TO ERASMUS STUDENTS:</b>			
<b>COURSE URL:</b>			

## 2 LEARNING OUTCOMES

<b>Learning Outcomes</b>
Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.
Upon successful completion of the course, the student will be able to:  Understand the molecular basis of metabolic function and regulation, both in normal and pathological conditions.  Understand how genetic information is transmitted and the basis of genetically transmittable disease.

<b>General Skills</b>
Name the desirable general skills upon successful completion of the module
Search, analysis and synthesis of data and information, ICT Use, Adaptation to new situations, Decision making, Autonomous work, Teamwork, Working in an international environment, Working in an interdisciplinary environment, Production of new research ideas Project design and management Equity and Inclusion, Respect for the natural environment, Sustainability, Demonstration of social, professional and moral responsibility and sensitivity to gender issues, Critical thinking, Promoting free, creative and inductive reasoning
Search, analysis and synthesis of data and information Demonstration of social, professional and moral responsibility and sensitivity to gender issues Critical thinking Promoting free, creative and inductive reasoning Communicate effectively in a medical environment Apply scientific principles, methods and knowledge to medical practice and research

### 3 COURSE CONTENT

Carbohydrates  
 -Monosaccharides.  
 Triose, tetrose, pentose, exose, aldoses, ketoses Disaccharides.  
 Glycogen, Starch, Cellulose. Polysaccharides. Glycosaminoglycans. Proteoglycans.  
 Oligosaccharide synthesis. Glycoproteins. Glycosylation of proteins.  
 Lipids and biological membranes.  
 -Role of lipids.  
 -Fatty acids - Structure and properties. Triacylglycerols.  
 -Structure of membrane lipids.  
 - Phosphoglycerides, sphingolipids, glycolipids. Sterols.  
 - Cholesterol, Vitamin D, Steroid hormones. Eicosanoids  
 - Prostaglandins  
 - Thromboxanes  
 - Leukotriene Cell membranes.  
 -Membrane proteins.  
 - Interaction of membranes and proteins.  
 Metabolism  
 Entry of glucose into cells - glycolysis.  
 Krebs cycle.  
 Respiratory chain- Oxidative phosphorylation.  
 Glucogenogenesis - glycogenolysis - blood glucose - regulation of glucose homeostasis.  $\beta$ -oxidation of fatty acids - ketone bodies.  
 Biosynthesis of lipids - blood lipoproteins.  
 Cholesterol (biosynthesis - conversions - atherosclerosis).  
 Amino acid catabolism (deamination processes - urea cycle - catabolism of the carbonate skeleton of amino acids).  
 Biosynthesis/catabolism of purine-pyrimidine nucleotides.  
 Integrattion of metabolism.  
 Transfer of genetic information  
 Structure, properties of nucleic acids and flow of genetic information.  
 Avery-McLeod-McCarty experiment.  
 Structure and nomenclature of DNA and RNA. Determation of DNA structure of DNA.  
 Higher structures of nucleic acids. DNA denaturation, hybridization, DNA microarrays.  
 Flow of genetic information. RNA synthesis. Protein synthesis.  
 DNA replication, repair and recombination.  
 Recombinant DNA Technology (Restriction Endonucleases, Membrane Detection Techniques, DNA Sequencing, Solid-Phase Nucleic Acid Synthesis. PCR. Real-time PCR. PCR Yield. Random Matching Oligonucleotides. Melting Temperature. Reverse-Transcription PCR. Inverse PCR.Applications of PCR).  
 Cloning of DNA segments. Vectors. Genomic and cDNA libraries and screening for genes. Eukaryotic gene manipulation.  
 Transgenic animals. Directed mutagenesis.  
 Exploring evolution - homologs, orthologs, paralogs

### 4 LEARNING & TEACHING METHODS - EVALUATION

<b>TEACHING METHOD</b> Face to face, Distance learning, etc.	Face to face
<b>USE OF INFORMATION &amp; COMMUNICATIONS TECHNOLOGY (ICT)</b> Use of ICT in Teaching, in Laboratory Education, in Communication with students	Use of ICT in Teaching Use of ICT in Laboratory Education Use of ICT in Communication with students

**TEACHING ORGANIZATION**

The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study/creation, project, creation, project. Etc.

The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards

Activity	Workload/semester
Lectures	65
Laboratory Exercise	20
Tutoring	22
Bibliographic research & analysis	70
<b>Total</b>	<b>177</b>

**STUDENT EVALUATION**

Description of the evaluation process

Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay/Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others

Please indicate all relevant information about the course assessment and how students are informed

**Student evaluation languages**

Greek

**Method (Formative or Concluding)**

Formative

Student evaluation methods	Percent
Written exam with multiple choice test	33
Written exam with essay answer questions	33
Written exam with short answer questions	33

**5 Suggested Bibliography**

Biochemistry, by Jeremy M. Berg, John L. Tymoczko, Gregory J. Gatto Jr., Lubert Stryer.  
Biochemistry, by Donald Voet, Judith G. Voet

## COURSE OUTLINE

### 1 GENERAL

<b>SCHOOL</b>	SCHOOL OF HEALTH SCIENCES		
<b>DEPARTMENT</b>	DEPARTMENT OF MEDICINE		
<b>LEVEL OF STUDIES</b>	ISCED level 6 – Bachelor’s or equivalent level		
<b>COURSE CODE</b>		<b>SEMESTER</b>	2
<b>COURSE TITLE</b>	HISTOLOGY -EMBRYOLOGY II		
<b>TEACHING ACTIVITIES</b> If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labsetc. If the ECTS Credits are awarded to the whole course, then please indicate theteaching hours per week and the corresponding ECTS Credits.		<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>
		6	5.0
<b>COURSE TYPE</b> Background, General Knowledge, Scientific Area, Skill Development	Scientific Area		
<b>PREREQUISITES</b>	No		
<b>TEACHING &amp; EXAMINATION LANGUAGE:</b>	Greek		
<b>COURSE OFFERED TO ERASMUSSTUDENTS:</b>			
<b>COURSE URL:</b>			

### 2 LEARNING OUTCOMES

<b>Learning Outcomes</b> Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.
This course is designed to induce the sound understanding and knowledge of the histological structure of fundamental organs and systems of the human body. The late embryonic period, in which tissue differentiation and organ development take place, is in detail also described.

<b>General Skills</b> Name the desirable general skills upon successful completion of the module  Search, analysis and synthesis of data and information, ICT Use, Adaptation to new situations, Decision making, Autonomous work, Teamwork, Working in an international environment, Working in an interdisciplinary environment, Production of new research ideas Project design and management Equity and Inclusion, Respect for the natural environment, Sustainability, Demonstration of social, professional and moral responsibility and sensitivity to gender issues, Critical thinking, Promoting free, creative and inductive reasoning
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Search, analysis and synthesis of data and information

ICT Use

Adaptation to new situations

Decision making

Working in an interdisciplinary environment

Equity and Inclusion

Demonstration of social, professional and moral responsibility and sensitivity to gender issues

Critical thinking

Promoting free, creative and inductive reasoning

Evaluate clinical cases, order laboratory tests, make differential diagnoses, and negotiate a management plan

Communicate effectively in a medical environment

Apply scientific principles, methods and knowledge to medical practice and research

### 3 COURSE CONTENT

In theory:

Special Part of Histology

1. Digestive System (structure of esophagus, stomach, small and large intestine, appendix)
2. Glands associated with digestive system (salivary glands, pancreas, liver, bile duct, gallbladder)
3. Respiratory System (nasal cavity, paranasal sinuses, nasopharynx, larynx, trachea, bronchial tree, pleura)
4. Skin and skin accessories
5. Urinary System (kidneys, bladder, urinary tract)
6. Pituitary gland and hypothalamus
7. Adrenal glands, Islets of Langerhans, Thyroid, Parathyroid and Epiphysis
8. Male Reproductive System (testicles, genital ducts, accessory genital glands, penis)
9. Female Reproductive System (ovaries, fallopian tubes, uterus, vagina, external genitalia, mammary glands)
10. Sensory Organs

Special Part of Embryology

1. Skeletal system (skull, limbs, spine)
2. Muscular system
3. Body cavities and serous membranes
4. Cardiovascular system
5. Respiratory system
6. Digestive system
7. Urogenital system
8. Head and neck
9. Ear
10. Eye
11. Skin and skin parts
12. Congenital anomalies

In practice:

Microscopy of organs and systems according to theoretical part

1. Digestive System
2. Respiratory System
3. Skin and skin accessories
4. Urinary System
5. Pituitary gland and hypothalamus
6. Adrenal glands, Islets of Langerhans, Thyroid, Parathyroid and Epiphysis.
7. Male Reproductive System
8. Female Reproductive System
9. Sensory Organs

Embryology  
10. Study of fetuses with congenital disorders

#### 4 LEARNING & TEACHING METHODS - EVALUATION

<b>TEACHING METHOD</b> Face to face, Distance learning, etc.	Face to face												
<b>USE OF INFORMATION &amp; COMMUNICATIONS TECHNOLOGY (ICT)</b> Use of ICT in Teaching, in Laboratory Education, in Communication with students	Use of ICT in Teaching Use of ICT in Laboratory Education Use of ICT in Communication with students												
<b>TEACHING ORGANIZATION</b> The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study/creation, project, creation, project. Etc.  The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards	<table border="1"> <thead> <tr> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>65</td> </tr> <tr> <td>Laboratory Exercise</td> <td>13</td> </tr> <tr> <td>Bibliographic research &amp; analysis</td> <td>37</td> </tr> <tr> <td>Project</td> <td>35</td> </tr> <tr> <td><b>Total</b></td> <td><b>150</b></td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	65	Laboratory Exercise	13	Bibliographic research & analysis	37	Project	35	<b>Total</b>	<b>150</b>
Activity	Workload/semester												
Lectures	65												
Laboratory Exercise	13												
Bibliographic research & analysis	37												
Project	35												
<b>Total</b>	<b>150</b>												

<b>STUDENT EVALUATION</b> Description of the evaluation process  Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay/Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others  Please indicate all relevant information about the course assessment and how students are informed	<p><b>Student evaluation languages</b> Greek</p> <p><b>Method (Formative or Concluding)</b> Formative</p> <table border="1"> <thead> <tr> <th>Student evaluation methods</th> <th>Percent</th> </tr> </thead> <tbody> <tr> <td>Written exam with multiple choice test</td> <td>100</td> </tr> </tbody> </table>	Student evaluation methods	Percent	Written exam with multiple choice test	100
Student evaluation methods	Percent				
Written exam with multiple choice test	100				

#### 5 Suggested Bibliography

1. The Developing Human: Clinically Oriented Embryology, 10th Edition by Keith L. Moore, T. V. N. Persaud and Mark G. Torchia. ISBN:978-0-323-31338-4, 2016, Elsevier Inc.
2. Histology - An Essential Textbook, 1st Edition by D. J. Lowrie, Jr. ISBN: 978-1626234130, 2020, Thieme.
3. Textbook of Histology, 4th Edition by Leslie P. Gartner. ISBN: 978-0323355636, 2016, Elsevier Inc.
4. Human Embryology and developmental biology, Bruce M. Carlson, 6<sup>th</sup> edition, ISBN: 978-0-323-52375-2, 2019, Elsevier Inc.

## COURSE OUTLINE

### 1 GENERAL

<b>SCHOOL</b>	SCHOOL OF HEALTH SCIENCES		
<b>DEPARTMENT</b>	DEPARTMENT OF MEDICINE		
<b>LEVEL OF STUDIES</b>	ISCED level 6 – Bachelor’s or equivalent level		
<b>COURSE CODE</b>		<b>SEMESTER</b>	2
<b>COURSE TITLE</b>	MEDICAL PHYSICS		
<b>TEACHING ACTIVITIES</b> If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labsetc. If the ECTS Credits are awarded to the whole course, then please indicate theteaching hours per week and the corresponding ECTS Credits.		<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>
		6	5.0
<b>COURSE TYPE</b> Background, General Knowledge, Scientific Area, Skill Development	Background		
<b>PREREQUISITES</b>	No		
<b>TEACHING &amp; EXAMINATION LANGUAGE:</b>	Greek		
<b>COURSE OFFERED TO ERASMUSSTUDENTS:</b>			
<b>COURSE URL:</b>			

### 2 LEARNING OUTCOMES

<b>Learning Outcomes</b> Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.
<p>Upon successful completion of the course, students will be able to know:</p> <ul style="list-style-type: none"> <li>• The basic principles of the physics of the human body.</li> <li>• The basic principles related to applications of physics in medicine.</li> <li>• The methods and operating principles of associated systems using radiation (ionizing and non-ionizing) for diagnostic and therapeutic purposes.</li> </ul>

<b>General Skills</b> Name the desirable general skills upon successful completion of the module  Search, analysis and synthesis of data and information, ICT Use, Adaptation to new situations, Decision making, Autonomous work, Teamwork, Working in an international environment, Working in an interdisciplinary environment, Production of new research ideas Project design and management Equity and Inclusion, Respect for the natural environment, Sustainability, Demonstration of social, professional and moral responsibility and sensitivity to gender issues, Critical thinking, Promoting free, creative
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## and inductive reasoning

Search, analysis and synthesis of data and information  
ICT Use,  
Adaptation to new situations  
Teamwork,  
Production of new research ideas  
Critical thinking  
Promoting free, creative and inductive reasoning

### 3 COURSE CONTENT

#### Theory

1. Evolution of Scientific Paradigms in Physics and Medical Physics.
2. Introduction to Medical Physics
3. Fluid Mechanics - Liquid Properties
4. Pressure on the Human Body
5. Heat and thermodynamics in biological systems
6. Basic Engineering Principles
7. Muscles and Forces
8. Optical Systems, Principles of Microscopy and Crystallography
9. Eye and Vision Physics
10. Physics of the Ear and Hearing
11. Biomechanics of the Cardiorespiratory System
12. Electromagnetism and Biological Effects
13. Recording of electrical/magnetic signals from the body
14. Medical applications of Nonlinear System Theory, Chaos Theory and Fractal Geometry
15. Biomedical Signal Processing
16. Introduction to Modern Physics
17. Nuclear Physics – Radioactivity
18. Interactions of Ionizing Radiation and Matter
19. Biological Effects and Dosimetry of Ionizing Radiation
20. X-ray Imaging Principles
21. Principles of Computed Tomography
22. Principles of Radioisotope Imaging
23. Principles of Nuclear Magnetic Resonance Imaging and Spectroscopy
24. Principles of Ultrasonic Imaging
25. Principles of Radiotherapy and Brachytherapy
26. Principles of radiation protection

#### Laboratory Exercises

1. Introduction to recording and processing experimental measurements - Theory of Error – Experimental data Statistical Analysis
2. Deriving Laws from Experimental Data – Least Squares Method – Linear, Power and Exponential Laws – Experimental and Least Square Curve Plots
3. Signal and Image Processing – Time Series analysis (EEG, MEG, ECG, MCG) - Fourier Synthesis and Analysis - Fourier Spectra derivation and interpretation – Filters and Noise Reduction
4. Radioactive Decay- Photoelectric phenomenon
- 5.

#### 4 LEARNING & TEACHING METHODS - EVALUATION

<b>TEACHING METHOD</b> Face to face, Distance learning, etc.	Face to face										
<b>USE OF INFORMATION &amp; COMMUNICATIONS TECHNOLOGY (ICT)</b> Use of ICT in Teaching, in Laboratory Education, in Communication with students	Use of ICT in Teaching Use of ICT in Laboratory Education Use of ICT in Communication with students										
<b>TEACHING ORGANIZATION</b> The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study/creation, project, creation, project. Etc.  The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards	<table border="1"> <thead> <tr> <th style="background-color: #f2f2f2;">Activity</th> <th style="background-color: #f2f2f2;">Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>65</td> </tr> <tr> <td>Laboratory Exercise</td> <td>13</td> </tr> <tr> <td>Bibliographic research &amp; analysis</td> <td>70</td> </tr> <tr> <td><b>Total</b></td> <td><b>148</b></td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	65	Laboratory Exercise	13	Bibliographic research & analysis	70	<b>Total</b>	<b>148</b>
Activity	Workload/semester										
Lectures	65										
Laboratory Exercise	13										
Bibliographic research & analysis	70										
<b>Total</b>	<b>148</b>										

<b>STUDENT EVALUATION</b> Description of the evaluation process  Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay/Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others  Please indicate all relevant information about the course assessment and how students are informed	<p><b>Student evaluation languages</b> English</p> <p><b>Method (Formative or Concluding)</b> Formative</p> <table border="1"> <thead> <tr> <th style="background-color: #f2f2f2;">Student evaluation methods</th> <th style="background-color: #f2f2f2;">Percent</th> </tr> </thead> <tbody> <tr> <td>Written exam with multiple choice test</td> <td>100</td> </tr> </tbody> </table>	Student evaluation methods	Percent	Written exam with multiple choice test	100
Student evaluation methods	Percent				
Written exam with multiple choice test	100				

#### 5 Suggested Bibliography

Radiation Physics for Medical Physicists (Graduate Texts in Physics) 3rd Edition 2016, by Ervin B. Podgorsak (Author) , Springer, ISBN-13: 978-3319253800

Physics of the Body (Medical Physics Series) 2nd Edition 2017, by John R. Cameron (Author), James G. Skofronick (Author), Roderick M. Grant (Author) , Medical Physics Pub Corp, ISBN-13: 978-1930524941

## COURSE OUTLINE

### 1 GENERAL

<b>SCHOOL</b>	SCHOOL OF HEALTH SCIENCES		
<b>DEPARTMENT</b>	DEPARTMENT OF MEDICINE		
<b>LEVEL OF STUDIES</b>	ISCED level 6 – Bachelor’s or equivalent level		
<b>COURSE CODE</b>		<b>SEMESTER</b>	2
<b>COURSE TITLE</b>	GENETICS		
<b>TEACHING ACTIVITIES</b> If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labsetc. If the ECTS Credits are awarded to the whole course, then please indicate theteaching hours per week and the corresponding ECTS Credits.	<b>TEACHING HOURS PER WEEK</b>		<b>ECTS CREDITS</b>
	6,5		6.0
<b>COURSE TYPE</b> Background, General Knowledge, Scientific Area, Skill Development	Background		
<b>PREREQUISITES</b>	No		
<b>TEACHING &amp; EXAMINATION LANGUAGE:</b>	Greek		
<b>COURSE OFFERED TO ERASMUSSTUDENTS:</b>			
<b>COURSE URL:</b>			

### 2 LEARNING OUTCOMES

<p><b>Learning Outcomes</b> Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</p>
<p>The course includes basic, but also specialized concepts of Genetics and in addition refers to and analyzes current and contemporary topics of all sub-subjects of Genetics (Classical Genetics, Molecular and Clinical Genetics, Cytogenetics, Immunogenetics, Pharmacogenetics, Genetics of Diseases, Gene Therapy, Genetic Counseling, etc.).</p> <p>So, the learning outcomes of the course are the acquisition of knowledge necessary for medical students interested in laboratory specialties (geneticists, microbiologists, virologists, pathologists, molecular biologists), but also for clinicians, who in the future will have a direct relationship with the clinical and molecular genetics (such as obstetricians, pediatricians, hematologists, pathologists, oncologists and other specialties).</p>

<p><b>General Skills</b></p> <p>Name the desirable general skills upon successful completion of the module</p> <p>Search, analysis and synthesis of data and information, ICT Use, Adaptation to new situations, Decision making,</p>
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Autonomous work, Teamwork, Working in an international environment, Working in an interdisciplinary environment, Production of new research ideas  
 Project design and management Equity and Inclusion, Respect for the natural environment, Sustainability, Demonstration of social, professional and moral responsibility and sensitivity to gender issues, Critical thinking, Promoting free, creative and inductive reasoning

Search, analysis and synthesis of genetic data and information.  
 ICT Use.  
 Adaptation to new situations in clinical genetics  
 Decision making  
 Autonomous and Teamwork  
 Production of new research ideas  
 Design and management Equity and Inclusion.  
 Respect for the natural environment, Sustainability  
 Demonstration of social, professional and moral responsibility and sensitivity to gender issues.  
 Critical thinking  
 Promoting free, creative and inductive reasoning  
 Communicate effectively in a medical environment

### 3 COURSE CONTENT

The teaching method is the productive teaching method. Course contains amphitheater lectures by Professors or faculty members, contract holders and PhDs and lectures by invited expert scientists on modern and topical genetics issues.

Theory and laboratory exercises in various subjects, such as:

- 1) Drosophila Genetics – Giant Chromosomes – Sex Chromatin
- 2) Blood group antigens – ABO and Rhesus factor
- 3) Human chromosomes – Normal and Pathological karyotype
- 4) Rolling exercise: Culturing human lymphocytes – Cell collection and staining – Evaluation of SCEs.
- 5) Molecular and biochemical genetics

Tutorial exercises such as:

- 1) International literature search
- 2) Probabilities
- 3) Oncogenes
- 4) Family trees
- 5) Mitosis and meiosis
- 6) Applications of Cytogenetics
- 7) Student presentations

### 4 LEARNING & TEACHING METHODS - EVALUATION

<b>TEACHING METHOD</b> Face to face, Distance learning, etc.	Face to face
<b>USE OF INFORMATION &amp; COMMUNICATIONS TECHNOLOGY (ICT)</b> Use of ICT in Teaching, in Laboratory Education, in Communication with students	Use of ICT in Teaching Use of ICT in Laboratory Education Use of ICT in Communication with students

**TEACHING ORGANIZATION**

The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study/creation, project, creation, project. Etc.

The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards

Activity	Workload/semester
Lectures	45
Tutoring	20
Laboratory Exercise	35
Bibliographic research & analysis	30
Project	14
Essay	6
<b>Total</b>	<b>150</b>

**STUDENT EVALUATION**

Description of the evaluation process

Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay/Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others

Please indicate all relevant information about the course assessment and how students are informed

**Student evaluation languages**

Greek

**Method (Formative or Concluding)**

Formative

Student evaluation methods	Percent
Written exam with multiple choice test	20
Written exam with essay answer questions	20
Written exam with short answer questions	10
Oral exam	10
Laboratory report	10
Essay	10
Public presentation	20

**5 Suggested Bibliography**

1. Emery's Elements of Medical Genetics and Genomics, by Peter D Turnpenny Sian Ellard and , 16<sup>th</sup> Ed, Elsevier, 27 Feb. 2021
2. Thompson & Thompson Genetics and Genomics in Medicine (Thompson and Thompson Genetics in Medicine) by Ronald Cohn, Stephen Scherer and Ada Hamosh, 9<sup>th</sup> ed, Saunders, 2 Aug. 2023
3. Genetics and Genomics in Medicine, by Tom Strachan and Anneke Lucassen, CRC Press, 1 Oct. 2022
4. Clinical Genetics and Genomics at a Glance by Neeta Lakhani, Kunal Kulkarni, et al., 1<sup>st</sup> ed, Wiley-Blackwell, 13 Jul 2023
5. Medical Genetics by Lynn B. Jorde, John C. Carey and Michael J. Bamshad, 6<sup>th</sup> ed, Elsevier, 30 Dec 2019

## COURSE OUTLINE

### 1 GENERAL

<b>SCHOOL</b>	SCHOOL OF HEALTH SCIENCES		
<b>DEPARTMENT</b>	DEPARTMENT OF MEDICINE		
<b>LEVEL OF STUDIES</b>	ISCED level 6 – Bachelor’s or equivalent level		
<b>COURSE CODE</b>		<b>SEMESTER</b>	2
<b>COURSE TITLE</b>	ENGLISH FOR MEDICINE II		
<b>TEACHING ACTIVITIES</b> If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labsetc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.		<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>
		4	3.0
<b>COURSE TYPE</b> Background, General Knowledge, Scientific Area, Skill Development	Background		
<b>PREREQUISITES</b>	No		
<b>TEACHING &amp; EXAMINATION LANGUAGE:</b>	English		
<b>COURSE OFFERED TO ERASMUS STUDENTS:</b>			
<b>COURSE URL:</b>			

### 2 LEARNING OUTCOMES

<p><b>Learning Outcomes</b> Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</p>
<p>After the successful completion of the course, students will:</p> <ul style="list-style-type: none"> <li>- be able to identify word parts in medical terms</li> <li>- know how to build medical terms</li> <li>- know how to break down medical terms into word components and define each component</li> <li>- have been familiarized with a great number of terms related to medicine</li> <li>- have promoted their ability to comprehend medical texts</li> <li>- have been acquainted with medical and layman’s terms</li> <li>- have been familiarized with medical abbreviations and acronyms</li> <li>- have developed oral communication skills and will be able to contribute effectively in discussions</li> <li>- have improved their writing skills</li> <li>- have improved academic skills such as notetaking and effective delivery of oral presentations</li> </ul>

<p><b>General Skills</b> Name the desirable general skills upon successful completion of the module</p>
-------------------------------------------------------------------------------------------------------------

Search, analysis and synthesis of data and information, ICT Use, Adaptation to new situations, Decision making, Autonomous work, Teamwork, Working in an international environment, Working in an interdisciplinary environment, Production of new research ideas

Project design and management Equity and Inclusion, Respect for the natural environment, Sustainability, Demonstration of social, professional and moral responsibility and sensitivity to gender issues, Critical thinking, Promoting free, creative and inductive reasoning

- Search, analysis and synthesis of data and information
- Autonomous work
- Teamwork
- Working in an international environment
- Adaptation to new situations
- Decision making
- Critical thinking
- Promoting free, creative and inductive reasoning
- Equity and Inclusion
- Demonstration of social, professional and moral responsibility and sensitivity to gender issues

### 3 COURSE CONTENT

- The Human Body in Health and Disease
  - Signs and Symptoms of Disease
  - Types of Disease Caused by Pathogens
  - Injuries, Wounds and Trauma
  - Treatment of Disease
  - Medical and Layman's Terms
  - Abbreviations
  - Words Easily Confused
  - Collocations
  - Idiomatic Expressions
- The Skeletal System
  - The Skeleton
  - The Skull
  - Bone Structure
  - Types of Bones
  - Types of Fractures
  - Postural Deformities
  - Medical and Layman's Terms
  - Abbreviations
  - Homonyms
  - Homophones
  - Words Easily Confused
  - Idiomatic Expressions
  - Mythonyms

- The Muscular System
  - Muscles
  - Fascia, Tendon, Aponeurosis
  - Types of Muscles
  - Muscle Tone
  - Origin and Insertion of a Muscle
  - Muscle Movement
  - Action of Muscles
  - Range of Motion
  - Names of Muscles
  - Movement Disorders
  - Medical and Layman's Terms
  - Eponyms
  - Toponyms
  - Abbreviations
  - Words Easily Confused
  - Idiomatic Expressions
  - Mythonyms
- The Nervous System
  - The Central Nervous System
    - The Brain
    - The Spinal Cord
  - The Peripheral Nervous System
    - The Somatic Nervous System
    - The Autonomic Nervous System
      - The Sympathetic Nervous System
      - The Parasympathetic Nervous System
  - The Nerves
  - Brain Injuries
  - Spinal Cord Injuries
  - Medical and Layman's Terms
  - Eponyms
  - Abbreviations
  - Homonyms
  - Words Easily Confused
  - Idiomatic Expressions
  - Mythonyms
- Mental Health
  - Psychiatric Institutions
  - Mental Health Professionals
  - Psychotherapy
  - Classification of Mental Disorders
- Genetics

- Principles of Heredity
- Genetic Material
- The Human Genome Project
- Alterations in the Genetic Material
  - Mutations
  - Point Mutations
  - Chromosomal Alterations
- DNA Repair Mechanisms
- Genetic Disorders
  - Single Gene Inheritance
  - Multifactorial Inheritance
  - Chromosomal Abnormalities
  - Mitochondrial Inheritance
- Genetic Testing – Genetic Counselling
- Gene Editing – CRISPR
- Laboratory Instruments and Equipment

#### 4 LEARNING & TEACHING METHODS - EVALUATION

<b>TEACHING METHOD</b> Face to face, Distance learning, etc.	Face to face												
<b>USE OF INFORMATION &amp; COMMUNICATIONS TECHNOLOGY (ICT)</b> Use of ICT in Teaching, in Laboratory Education, in Communication with students	Use of ICT in Teaching Use of ICT in Communication with students												
<b>TEACHING ORGANIZATION</b> The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study/creation, project, creation, project. Etc.  The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards	<table border="1"> <thead> <tr> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Bibliographic research &amp; analysis</td> <td>26</td> </tr> <tr> <td>Speaking, listening &amp; writing activities</td> <td>26</td> </tr> <tr> <td>Research Project</td> <td>18</td> </tr> <tr> <td>Study</td> <td>20</td> </tr> <tr> <td><b>Total</b></td> <td><b>90</b></td> </tr> </tbody> </table>	Activity	Workload/semester	Bibliographic research & analysis	26	Speaking, listening & writing activities	26	Research Project	18	Study	20	<b>Total</b>	<b>90</b>
Activity	Workload/semester												
Bibliographic research & analysis	26												
Speaking, listening & writing activities	26												
Research Project	18												
Study	20												
<b>Total</b>	<b>90</b>												
<b>STUDENT EVALUATION</b> Description of the evaluation process	Student evaluation languages English												

Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay/Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others

Please indicate all relevant information about the course assessment and how students are informed

#### Method (Formative or Concluding)

Formative

Student evaluation methods	Percent
multiple choice test	20
short answer questions	20
matching exercise	20
cloze test	20
true/false questions	20

## 5 Suggested Bibliography

- Θεώνη Καβουρά, Ελένη Ναλμπάντη, Focus on the Language of Medicine in Health Sciences, Ιωάννης Κωνσταντάρας, 2022
- Γεώργιος Μιχαηλίδης, Νέλλη Βέζου-Μαγκούτη, Αγγλοελληνικό Ελληνοαγγλικό Λεξικό των Ιατρικών Όρων, Ιωάννης Κωνσταντάρας, 2005

## COURSE OUTLINE

### 1 GENERAL

<b>SCHOOL</b>	SCHOOL OF HEALTH SCIENCES		
<b>DEPARTMENT</b>	DEPARTMENT OF MEDICINE		
<b>LEVEL OF STUDIES</b>	ISCED level 6 – Bachelor's or equivalent level		
<b>COURSE CODE</b>		<b>SEMESTER</b>	3
<b>COURSE TITLE</b>	ANATOMY I		
<b>TEACHING ACTIVITIES</b> If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labsetc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.	<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>	
	9	9.0	

<b>COURSE TYPE</b> Background, General Knowledge, Scientific Area, Skill Development	Background
<b>PREREQUISITES</b>	No
<b>TEACHING &amp; EXAMINATION LANGUAGE:</b>	Greek
<b>COURSE OFFERED TO ERASMUS STUDENTS:</b>	
<b>COURSE URL:</b>	

## 2 LEARNING OUTCOMES

### Learning Outcomes

Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.

With the successful completion of the course the student will be able to:

- Know, understand and appropriately use medical and anatomical terminology, to describe the structure and form of the human body and to efficiently communicate in a medical setting.
- Recognize and describe the structure and form of the musculoskeletal system parts (bones, joints, muscles) and define their topographical and functional relations with the other organs and systems of the human body
- Recognize and describe the structure and form of the circulatory system parts (heart and vessels) and define their topographical and functional relations with the other organs and systems of the human body
- Recognize and describe the structure and form of the sensory organs (skin, eyes, ears, nose, tongue) and define their topographical and functional relations with the other organs and systems of the human body
- Recognize and describe the structure and form of the endocrine glands (thyroid, parathyroids, adrenals, pituitary, genital glands) and define their topographical and functional relations with the other organs and systems of the human body
- Combine and organize his/her anatomical knowledge and apply them in the clinical and diagnostic evaluation of the musculoskeletal, circulatory and sensory diseases, in the basic principles of kinesiology (movement) and in the recognition of the anatomical structures with the different types of imaging techniques.

### General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information, ICT Use, Adaptation to new situations, Decision making, Autonomous work, Teamwork, Working in an international environment, Working in an interdisciplinary environment, Production of new research ideas

Project design and management Equity and Inclusion, Respect for the natural environment, Sustainability, Demonstration of social, professional and moral responsibility and sensitivity to gender issues, Critical thinking, Promoting free, creative and inductive reasoning

Adaptation to new situations  
Autonomous work  
Teamwork  
Critical thinking

Promoting free, creative and inductive reasoning  
 Communicate effectively in a medical environment

### 3 COURSE CONTENT

**Lectures:**

1. Introduction to Human Anatomy: Organ systems, Planes and Axes of the body, Kinesiology, Medical and Anatomical Terminology
2. Musculoskeletal system: Osteology – Myology - Arthrology
3. Circulatory system and Heart
4. Sensory Organs
5. Endocrine glands

**Laboratory practice on Osteology and Arthrology:**

1. Introduction to Human Skeleton
2. Vertebral Column
3. Thorax skeleton
4. Shoulder skeleton
5. Upper limb skeleton, A'
6. Upper limb skeleton, B'
7. Lower limb skeleton, A' (pelvis)
8. Lower limb skeleton, B'
9. Cranium, A'
10. Cranium, B'
11. Joints of the vertebral column, thorax and cranium
12. Joints of the upper and lower limbs
13. Kinesiology: upright position, gait and sports

### 4 LEARNING & TEACHING METHODS - EVALUATION

<b>TEACHING METHOD</b> Face to face, Distance learning, etc.	Face to face														
<b>USE OF INFORMATION &amp; COMMUNICATIONS TECHNOLOGY (ICT)</b> Use of ICT in Teaching, in Laboratory Education, in Communication with students	Use of ICT in Teaching Use of ICT in Laboratory Education Use of ICT in Communication with students														
<b>TEACHING ORGANIZATION</b> The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study/creation, project, creation, project. Etc.  The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards	<table border="1"> <thead> <tr> <th style="background-color: #f2f2f2;">Activity</th> <th style="background-color: #f2f2f2;">Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>104</td> </tr> <tr> <td>Laboratory Practice</td> <td>13</td> </tr> <tr> <td>Supervised study on bones and anatomical models</td> <td>20</td> </tr> <tr> <td>Supervised study on the digital anatomical table</td> <td>20</td> </tr> <tr> <td>Unsupervised study</td> <td>100</td> </tr> <tr> <td><b>Total</b></td> <td><b>259</b></td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	104	Laboratory Practice	13	Supervised study on bones and anatomical models	20	Supervised study on the digital anatomical table	20	Unsupervised study	100	<b>Total</b>	<b>259</b>
Activity	Workload/semester														
Lectures	104														
Laboratory Practice	13														
Supervised study on bones and anatomical models	20														
Supervised study on the digital anatomical table	20														
Unsupervised study	100														
<b>Total</b>	<b>259</b>														

**STUDENT EVALUATION**

Description of the evaluation process

Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay/Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others

Please indicate all relevant information about the course assessment and how students are informed

**Student evaluation languages:** Greek**Method (Formative or Concluding):** Formative

Student evaluation methods	Percent
Oral final exam	100

Successful attendance and oral assessment of the laboratory practice is mandatory for the participation of the student in the final exam. The lab's outline is posted on the course's e-class.

The students that pass the written midterm exam on the musculoskeletal system are exempted from this subject in the final exam.

The oral final exam is held at the end of the academic term.

**5 SUGGESTED BIBLIOGRAPHY**

1. Άγιος Α. Περιγραφική και Εφαρμοσμένη Ανατομική, Τόμοι, Α, Β, Γ & Δ., University Studio Press, 1997
2. Agur A.M., Dalley A.F., Grant's Ανατομία – Έγχρωμος Άτλας. Πασχαλίδης, 2012
3. Drake R.L., Vogl W., Mitchell A.W. Gray's Ανατομία. Πασχαλίδης, 2006
4. Gilroy A.M., Ανατομία του ανθρώπου. 2<sup>η</sup> έκδοση, 1<sup>η</sup> ελληνική έκδοση, Κωνσταντάρας 2017
5. Gilroy A.M., MacPherson B.R., Ross L.M., Voll M., Wesker K. Βασική Περιγραφική Ανατομική, I, II, III & IV, Πασχαλίδης, 2009
6. Gray's Anatomy - The Anatomic Basis of Clinical Practice. 41st Ed. Elsevier, 2016
7. Hansen J.T., Lambert D.R. Βασική Κλινική Ανατομία του Netter, Ανατομία I. Πασχαλίδης, 2011
8. Ellis H., Mahadevan V. Κλινική Ανατομική. Παρισιάνου, 2013
9. Marieb E, Wilhelm P B, Mallat J. Ανατομία, 8<sup>η</sup> εκδ., Ιατρικές Εκδόσεις Λαγός Δημήτριος
10. Moore K.L., Dalley A.F., Agur A.M. Κλινική Ανατομία. Πασχαλίδης, 2012
11. Netter F. Ανατομία του Ανθρώπου, Άτλας Βασικών Ιατρικών Επιστημών. Πασχαλίδης, 2004
12. Platzer W., Shiozava T., Fritsch H., Kuhnel W., Kahle W., Frotscher M., Schmitz F. Εγχειρίδιο Περιγραφικής Ανατομικής. 4η εκδ., Π.Χ. Πασχαλίδης, 2023
13. Rohen, Yokochi, Lutjen-Drecoll, Έγχρωμος Άτλας Ανατομικής του Ανθρώπου, 7η εκδ. Πασχαλίδης 2011
14. Schunke M., Schulte E., Schumacher U., Voll M., Wesker K. Βασική Περιγραφική Ανατομική I & II, Πασχαλίδης, 2007
15. Skandalakis J.E. Surgical Anatomy. The embryologic and Anatomic Basis of Modern Surgery. Paschalidis Medical Publications, 2004
16. Sobotta Άτλας Ανατομικής του Ανθρώπου. 22η Έκδοση – 6η Ελληνική Έκδοση, Παρισιάνου, 2010
17. Waschke J, Bockers T, Paulsen F., Sobotta Ανατομία, με έγχρωμο Άτλαντα, Π.Χ. Πασχαλίδης – Broken Hill Publishers, 2019
18. Winesky R. Snell's Clinical Anatomy by regions. 10th ed. Wolters Kluwer, 2019

## COURSE OUTLINE

### 1 GENERAL

<b>SCHOOL</b>	SCHOOL OF HEALTH SCIENCES		
<b>DEPARTMENT</b>	DEPARTMENT OF MEDICINE		
<b>LEVEL OF STUDIES</b>	ISCED level 6 – Bachelor’s or equivalent level		
<b>COURSE CODE</b>		<b>SEMESTER</b>	3
<b>COURSE TITLE</b>	PHYSIOLOGY II		
<b>TEACHING ACTIVITIES</b> If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.		<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>
		4,4	6.0
<b>COURSE TYPE</b> Background, General Knowledge, Scientific Area, Skill Development	Scientific Area		
<b>PREREQUISITES</b>	No		
<b>TEACHING &amp; EXAMINATION LANGUAGE:</b>	Greek		
<b>COURSE OFFERED TO ERASMUS STUDENTS:</b>			
<b>COURSE URL:</b>			

### 2 LEARNING OUTCOMES

<p><b>Learning Outcomes</b> Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</p>
<p>Upon successful completion of the course the student will be able to:</p> <ul style="list-style-type: none"> <li>- Know and understand the basic principles of the functioning of the autonomic nervous system</li> <li>- Know and understand the basic principles of the functioning of the cardiovascular system</li> <li>- Know and understand the basic principles of the respiratory system function</li> <li>- Know and understand the basic principles of urinary system function</li> <li>- Know and understand the basic principles of the functioning of the endocrine system</li> <li>- Know and understand the basic principles of the functioning of the reproductive system</li> <li>- Know and understand the relationships between these systems and how they affect basic vital functions</li> <li>- Representative pathological conditions and diseases associated with impaired functionality of the above systems</li> </ul>

#### General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information, ICT Use, Adaptation to new situations, Decision making,

Autonomous work, Teamwork, Working in an international environment, Working in an interdisciplinary environment, Production of new research ideas  
 Project design and management Equity and Inclusion, Respect for the natural environment, Sustainability, Demonstration of social, professional and moral responsibility and sensitivity to gender issues, Critical thinking, Promoting free, creative and inductive reasoning

Search, analysis and synthesis of data and information  
 Decision making  
 Autonomous work  
 Teamwork  
 Project design  
 Critical thinking,  
 Promoting free, creative and inductive reasoning

### 3 COURSE CONTENT

Theoretical:  
**AUTONOMIC NERVOUS SYSTEM:** Organization & structure, Neurotransmitters, Adrenal medulla, Actions on organs & systems  
**RESPIRATORY SYSTEM:** Structure, Function, Volumes & Capacities, Surface tension - Surfactant, Pressure-volume curve, Respiratory work, Gas exchange in the lung, Pulmonary blood flow, Respiratory gases in the blood, Control & regulation of breathing,  
 Breath in special conditions **ACID-BASE BALANCE:** PH & Buffer systems, Acid-base disorders. Metabolic acidosis, Metabolic alkalosis, Respiratory acidosis, Respiratory alkalosis.  
**CARDIOVASCULAR SYSTEM:** Heart structure, Vessel & vein structure, Cardiac cycle, Cardiac stimulation, ECG, Pressure-volume ratio in the heart, Cardiac workload, Pulse volume regulation, Venous return, Arterial pressure, Perfusion - myocardial oxygenation, Circulation regulation, Fetal & Neonatal circulation  
**ENDOCRINE SYSTEM:** Hormones - categories - biosynthesis, Hormonal actions - hormone regulation, Signal transmission to the cell, Hypothalamus and Hypothalamic hormones, Pituitary hormones, Thyroid hormones, Adrenal cortex and medulla hormones, Gonad hormones  
**PHYSIOLOGY OF THE REPRODUCTIVE SYSTEM:** Hypothalamus - Pituitary – Gonad axis, Testicular function – Testicular hormones – Spermatogenesis, Ovarian function - Ovarian hormones, Ovulation - Menstruation cycle, Intercourse - Fertilization - Pregnancy  
**URINARY SYSTEM – KIDNEYS:** Functional anatomical description, renal perfusion, Glomerular filtration - Reabsorption - mechanisms regulating renal function, homeostasis H<sub>2</sub>O Na<sup>+</sup> homeostasis, K<sup>+</sup> homeostasis, Ca<sup>2+</sup> & mg<sup>2+</sup> homeostasis, urine formation, concentration and excretion.  
 Laboratory exercises:  
 1. Lung auscultation - spirometry  
 2. Frog heart automation - effect of hot, cold, Ca<sup>++</sup> ions, K<sup>+</sup> ions  
 3. Stannius ligatures - law of all or none in the frog heart muscle  
 4. Heart auscultation - Electrocardiogram  
 5. Glucose tolerance test - Blood pressure measurement  
 6. Rat urinary and genital tract - TESE - vaginal gilt  
 7. CPR - Use of automatic defibrillator - Drowning treatment - lateral resuscitation site

### 4 LEARNING & TEACHING METHODS - EVALUATION

TEACHING METHOD	
Face to face, Distance learning, etc.	Face to face Distance Learning (when applicable)

<p><b>USE OF INFORMATION &amp; COMMUNICATIONS TECHNOLOGY (ICT)</b> Use of ICT in Teaching, in Laboratory Education, in Communication with students</p>	<p>Use of ICT in Teaching Use of ITC in Laboratory Education Use of ICT in Communication with students</p>										
<p><b>TEACHING ORGANIZATION</b> The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research &amp; analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study/creation, project, creation, project. Etc.</p> <p>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards</p>	<table border="1" data-bbox="898 394 1485 663"> <thead> <tr> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>65</td> </tr> <tr> <td>Laboratory Exercises</td> <td>14</td> </tr> <tr> <td>Study, Bibliographic research and analysis</td> <td>95</td> </tr> <tr> <td><b>Total</b></td> <td><b>174</b></td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	65	Laboratory Exercises	14	Study, Bibliographic research and analysis	95	<b>Total</b>	<b>174</b>
Activity	Workload/semester										
Lectures	65										
Laboratory Exercises	14										
Study, Bibliographic research and analysis	95										
<b>Total</b>	<b>174</b>										
<p><b>STUDENT EVALUATION</b> Description of the evaluation process</p> <p>Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay/Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others</p> <p>Please indicate all relevant information about the course assessment and how students are informed</p>	<p><b>Student evaluation languages</b> Greek</p> <p><b>Method (Formative or Concluding)</b> Formative</p> <table border="1" data-bbox="825 999 1479 1173"> <thead> <tr> <th>Student evaluation methods</th> <th>Percent</th> </tr> </thead> <tbody> <tr> <td>Written exam with multiple choice test</td> <td>20</td> </tr> <tr> <td>Oral exam</td> <td>80</td> </tr> </tbody> </table>	Student evaluation methods	Percent	Written exam with multiple choice test	20	Oral exam	80				
Student evaluation methods	Percent										
Written exam with multiple choice test	20										
Oral exam	80										

## 5 Suggested Bibliography

- PowerPoint presentations (e-class)
- Relevant bibliography from PubMed and other websites presented and renewed annually
- Suggested books:
  5. Human Physiology: An Integrated Approach, 8th edition, Dee Unglaub Silverthorn University of Texas, Austin, Published by Pearson (January 3rd 2018) - Copyright © 2019, ISBN 9781292259543
  6. Introduction to Human Physiology, Lauralee Sherwood, 8<sup>th</sup> edition, 2017, Brooks/COLE, Cengage Learning, ISBN 9781133104544
  7. Medical Physiology, W. Boron & E. Boulpaep, 3<sup>rd</sup> Edition, 2017, Elsevier, ISBN 9781455743773
  8. Physiology, L. Costanzo, 6<sup>th</sup> edition, 2018, Elsevier, ISBN 9780323478816

## COURSE OUTLINE

### 1 GENERAL

<b>SCHOOL</b>	SCHOOL OF HEALTH SCIENCES		
<b>DEPARTMENT</b>	DEPARTMENT OF MEDICINE		
<b>LEVEL OF STUDIES</b>	ISCED level 6 – Bachelor’s or equivalent level		
<b>COURSE CODE</b>		<b>SEMESTER</b>	3
<b>COURSE TITLE</b>	HYGIENE		
<b>TEACHING ACTIVITIES</b> If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labsetc. If the ECTS Credits are awarded to the whole course, then please indicate theteaching hours per week and the corresponding ECTS Credits.	<b>TEACHING HOURS PERWEEK</b>		<b>ECTS CREDITS</b>
	5		6.0
<b>COURSE TYPE</b> Background, General Knowledge, Scientific Area, Skill Development	Background, General Knowledge		
<b>PREREQUISITES</b>	No		
<b>TEACHING &amp; EXAMINATION LANGUAGE:</b>	Greek		
<b>COURSE OFFERED TO ERASMUSSTUDENTS:</b>			
<b>COURSE URL:</b>			

### 2 LEARNING OUTCOMES

<p><b>Learning Outcomes</b> Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</p>
<p>Upon successful completion of the course the student will be able to know</p> <ul style="list-style-type: none"> <li>• the principles of research methodology in Hygiene and Public Health</li> <li>• the factors affecting Public Health</li> <li>• measuring the incidence of outcomes in epidemiological studies</li> <li>• study and evaluation of epidemiological data</li> <li>• the advantages and disadvantages of epidemiological studies</li> <li>• the random and systematic error inherent in epidemiological studies.</li> <li>• the determinants of health (and disease) related to social and environmental factors;</li> <li>• the basic principles of personal and social hygiene</li> <li>• the clinical dimensions of Hygiene</li> </ul>

<p><b>General Skills</b></p> <p>Name the desirable general skills upon successful completion of the module</p> <p>Search, analysis and synthesis of data and information, ICT Use, Adaptation to new situations, Decision making,</p>
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Autonomous work, Teamwork, Working in an international environment, Working in an interdisciplinary environment, Production of new research ideas  
 Project design and management Equity and Inclusion, Respect for the natural environment, Sustainability, Demonstration of social, professional and moral responsibility and sensitivity to gender issues, Critical thinking, Promoting free, creative and inductive reasoning

The course strengthens the following general abilities, and trains the student to:

- Evaluates scientific works, in terms of epidemiological design based on research methodology
- demonstrates social, professional and ethical responsibility
- Distinguishes the clinical dimensions of hygiene in medical procedure

### 3 COURSE CONTENT

Theoretical content:

1. Introduction to Hygiene and historical review of the multidisciplinary nature of Hygiene
2. Effects on health from environmental exogenous factors
3. Public Health - Public Health. Food hygiene, Nutrition and health
4. Health problems due to contamination and pollution of food and water and air
5. Health of the natural environment, Environmental Medicine, Bioclimatology, Medical Ecology
6. Environment and Health
7. Water hygiene, Physical, Chemical and Microbiological tests of water
8. Waterborne - foodborne infections
9. 9. Sanitary problems of water supply and water refineries
10. Sewage and waste sanitation problems
11. Indoor pollution and health
12. Sick building syndrome
13. Introduction to Medical Demography
14. Introduction to Medical Epidemiology
15. Issues of special Epidemiology and Hygiene
16. Primary and Secondary Prevention
17. Research methodology in Public Health - Public Health.

Possibility of preparing a paper with a complete presentation of it within the course, the score of which is counted in the final grade

### 4 LEARNING & TEACHING METHODS - EVALUATION

<b>TEACHING METHOD</b> Face to face, Distance learning, etc.	Face to face
<b>USE OF INFORMATION &amp; COMMUNICATIONS TECHNOLOGY (ICT)</b> Use of ICT in Teaching, in Laboratory Education, in Communication with students	Use of ICT in Teaching Use of ICT in Laboratory Education Use of ICT in Communication with students

**TEACHING ORGANIZATION**

The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study/creation, project, creation, project. Etc.

The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards

Activity	Workload/semester
Lectures	52
Bibliographic research & analysis	100
<b>Total</b>	<b>152</b>

**STUDENT EVALUATION**

Description of the evaluation process

Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay/Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others

Please indicate all relevant information about the course assessment and how students are informed

**Student evaluation languages**

Greek

**Method (Formative or Concluding)**

Formative

Student evaluation methods	Percent
Written exam with multiple choice test	80
Written exam with essay answer questions	20

**5 Suggested Bibliography**

1. Hygiene and epidemiology

Edition: 3<sup>rd</sup> ed./2023

Authors: Arvanitidou - Vagiona M.

ISBN: 9789601225944

Type: Book

Publisher: UNIVERSITY STUDIO PRESS - GRAPHIC ARTS AND PUBLISHING COMPANY

2. Epidemiology

Edition: 5/2016 Authors: LEON GORDIS

ISBN: 9789609427531

Type: Book

Publisher: GOTSIS KON/NOS & SIA E.E.

## COURSE OUTLINE

### 1 GENERAL

<b>SCHOOL</b>	SCHOOL OF HEALTH SCIENCES		
<b>DEPARTMENT</b>	DEPARTMENT OF MEDICINE		
<b>LEVEL OF STUDIES</b>	ISCED level 6 – Bachelor’s or equivalent level		
<b>COURSE CODE</b>		<b>SEMESTER</b>	3
<b>COURSE TITLE</b>	MEDICAL STATISTICS		
<b>TEACHING ACTIVITIES</b> If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labsetc. If the ECTS Credits are awarded to the whole course, then please indicate theteaching hours per week and the corresponding ECTS Credits.		<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>
		4	4.0
<b>COURSE TYPE</b> Background, General Knowledge, Scientific Area, Skill Development	Background, Skill Development		
<b>PREREQUISITES</b>	No		
<b>TEACHING &amp; EXAMINATION LANGUAGE:</b>	Greek		
<b>COURSE OFFERED TO ERASMUSSTUDENTS:</b>			
<b>COURSE URL:</b>			

### 2 LEARNING OUTCOMES

<p><b>Learning Outcomes</b> Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</p>
<p>The course aims to present the most important statistical techniques for the description and analysis of medical data and to familiarize students with statistical packages.</p> <p>Upon successful completion of the course, the student will be able to:</p> <ul style="list-style-type: none"> <li>- to understand the basic concepts of statistical science,</li> <li>- calculate and interpret descriptive measures of central tendency and dispersion,</li> <li>- investigate the relationship between variables using correlation techniques,</li> <li>- to predict the values of a variable using regression analysis,</li> <li>- compare two or more percentages or average values (for dependent and independent samples) and justify the results according to the level of significance,</li> <li>- understand and correctly interpret statistical significance.</li> <li>- to know the conditions required for the application of the statistical methods he chooses to use, to understand the necessity of checking these conditions and to be able to choose alternative statistical methods,</li> <li>- to be aware of the error contained in the conclusions derived from the statistical analysis he carries out,</li> <li>- to be able to calculate the normal values of a parameter and to be able to evaluate the reliability of laboratory methods, based on sensitivity and specificity,</li> </ul>

- be able to calculate the risk of developing a condition for people exposed to a potential risk factor compared to people not exposed to that factor,
- to be able to calculate the survival time of a group of patients,
- be able to use statistical programs to process medical data.

### General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information, ICT Use, Adaptation to new situations, Decision making, Autonomous work, Teamwork, Working in an international environment, Working in an interdisciplinary environment, Production of new research ideas  
Project design and management Equity and Inclusion, Respect for the natural environment, Sustainability, Demonstration of social, professional and moral responsibility and sensitivity to gender issues, Critical thinking, Promoting free, creative and inductive reasoning

Research, analysis and synthesize of data and information, using the necessary technologies.  
Autonomous work.  
Team work.  
Production of new research ideas.  
Promotion of free, creative and inductive thinking.  
Search, analysis and synthesis of data and information  
Apply scientific principles, methods and knowledge to medical practice and research

## 3 COURSE CONTENT

Descriptive statistics. Variable, types of variables, statistical tables, graphical methods, numerical descriptive measures of central tendency and variability, coefficient of variation, Gaussian distribution, transformations, normal values, evaluation of laboratory findings (sensitivity, specificity, positive and negative predictive value), ROC curve (Receiver Operator Curve).  
Parameter estimation. Point estimation, confidence interval and standard error in estimation (i) the mean, variance and percentage in a population and (ii) the difference of the means and percentages and the ratio of the variances in two populations.  
Statistical tests. Null and alternative hypothesis, type I and II error, power of a test, p-value of a test, the concept of statistical significance, hypothesis testing (i) about the mean, variance and percentage in a population and (ii) for the difference of means and percentages and the ratio of variances in two populations, pairwise observations.  
Analysis of variance. Analysis of variance for independent samples, analysis of variance table, multiple comparisons.  
Qualitative data analysis. Contingency tables,  $\chi^2$  test as a criterion of association and goodness of fit of qualitative characteristics, simple logistic regression model, relative risk (RR), relative odds ratio (OR).  
Statistical correlation and dependence. Pearson's r correlation coefficient, least squares method, prediction, simple linear regression model, coefficient of determination.  
Non-parametric controls. Advantages and disadvantages of non-parametric tests, Kolmogorov-Smirnov one-sample test, Wilcoxon signed rank tests, Mann-Whitney U, Kruskal-Wallis, Spearman's  $\rho$  correlation coefficient.  
Survival analysis. General, censored data, survival tables, survival function, hazard function, survival curves, Kaplan-Meier method, comparisons between survival curves, simple Cox regression model.  
The laboratory exercises of the Medical Statistics course include the analysis of medical data with the help of computers and appropriate statistical packages.

## 4 LEARNING & TEACHING METHODS - EVALUATION

<b>TEACHING METHOD</b> Face to face, Distance learning, etc.	Face to face
-----------------------------------------------------------------	--------------

<p><b>USE OF INFORMATION &amp; COMMUNICATIONS TECHNOLOGY (ICT)</b> Use of ICT in Teaching, in Laboratory Education, in Communication with students</p>	<p>Use of ICT in Teaching Use of ICT in Laboratory Education Use of ICT in Communication with students</p>												
<p><b>TEACHING ORGANIZATION</b> The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research &amp; analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study/creation, project, creation, project. Etc.</p> <p>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards</p>	<table border="1"> <thead> <tr> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>39</td> </tr> <tr> <td>Laboratory Exercise</td> <td>13</td> </tr> <tr> <td>Bibliographic research &amp; analysis</td> <td>30</td> </tr> <tr> <td>Project</td> <td>26</td> </tr> <tr> <td><b>Total</b></td> <td><b>108</b></td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	39	Laboratory Exercise	13	Bibliographic research & analysis	30	Project	26	<b>Total</b>	<b>108</b>
Activity	Workload/semester												
Lectures	39												
Laboratory Exercise	13												
Bibliographic research & analysis	30												
Project	26												
<b>Total</b>	<b>108</b>												

<p><b>STUDENT EVALUATION</b> Description of the evaluation process</p> <p>Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay/Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others</p> <p>Please indicate all relevant information about the course assessment and how students are informed</p>	<p><b>Student evaluation languages</b> Greek</p> <p><b>Method (Formative or Concluding)</b> Formative</p> <table border="1"> <thead> <tr> <th>Student evaluation methods</th> <th>Percent</th> </tr> </thead> <tbody> <tr> <td>Written exam with multiple choice test</td> <td>30</td> </tr> <tr> <td>Written exam with essay answer questions</td> <td>30</td> </tr> <tr> <td>Written exam with short answer questions</td> <td>40</td> </tr> </tbody> </table>	Student evaluation methods	Percent	Written exam with multiple choice test	30	Written exam with essay answer questions	30	Written exam with short answer questions	40
Student evaluation methods	Percent								
Written exam with multiple choice test	30								
Written exam with essay answer questions	30								
Written exam with short answer questions	40								

## 5 Suggested Bibliography

- Simon, S. D. (2006). *Statistical evidence in medical trials: What do the data really tell us?* New York: Oxford University Press.
- Kirkwood B. R. & Sterne J. (2010). *Essential Medical Statistics*. John Wiley & Sons.
- Blair, R. C., & Taylor, R. A. (2008). *Biostatistics for the health sciences (1st ed.)*. Upper Saddle River, NJ: Pearson Prentice Hall.
- Sahler, O. J. Z., & Carr, J. E. (Eds.). (2007). *The behavioral sciences and health care (2nd ed.)*. Cambridge, MA: Hogrefe & Huber Publishers.
- Sibbald, B., & Roland, M. (1998). Understanding controlled trials: Why are randomised controlled trials important? *BMJ*, 316(7126), 201.
- Batavia, M. (2001). *Clinical research for health professionals*. Boston: Butterworth Heinemann.
- Campbell, M. J., Machin, D., & Walters, S. J. (2007). *Medical statistics: A textbook for the health sciences (4th ed.)*. Hoboken, NJ: Wiley.
- Forthofer, R. N., Lee, E. S., & Hernandez, M. (2007). *Biostatistics: A guide to design, analysis, and discovery (2nd ed.)*. Amsterdam: Elsevier Academic Press.
- Huth, E. J. (1999). *Writing and publishing in medicine (3rd ed.)*. Baltimore, MD: Williams & Wilkins.

- Kane R. L. (Ed.). (2006). Understanding health care outcomes research, 2nd ed. Sudbury, MA: Jones and Bartlett.
- Leandro, G. (2005). Meta-analysis in medical research: the handbook for the understanding and practice of meta-analysis. Malden, MA: BMJ Books.
- Petitti, D.B. (2000). Meta-Analysis, Decision Analysis, and Cost-Effectiveness Analysis: Methods for Quantitative Synthesis in Medicine (2nd Ed.). New York: Oxford University Press.
- Petrie, A., Sabin C. Systematic Reviews and MetaAnalysis (2005). In Medical Statistics at a Glance (pp. 116-118). Malden, Massachusetts: Blackwell Publishing.
- Riegelman, R. K. (2005). Studying a study and testing a test: How to read the medical evidence (5th ed.). Philadelphia: Lippincott Williams & Wilkins.
- Whitehead, A. (2002). Meta-analysis of controlled clinical trials. New York: John Wiley & Sons.
- Zlowodzki, Poolman, Kerkhoffs et al. (2007). How to interpret a meta-analysis and judge its value as a guide for clinical practice. Acta Orthopaedica, 78, 598-609.

## COURSE OUTLINE

### 1 GENERAL

<b>SCHOOL</b>	SCHOOL OF HEALTH SCIENCES		
<b>DEPARTMENT</b>	DEPARTMENT OF MEDICINE		
<b>LEVEL OF STUDIES</b>	ISCED level 6 – Bachelor’s or equivalent level		
<b>COURSE CODE</b>		<b>SEMESTER</b>	3
<b>COURSE TITLE</b>	ENGLISH FOR MEDICINE III		
<b>TEACHING ACTIVITIES</b> If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labsetc. If the ECTS Credits are awarded to the whole course, then please indicate theteaching hours per week and the corresponding ECTS Credits.		<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>
		4	3.0
<b>COURSE TYPE</b> Background, General Knowledge, Scientific Area, Skill Development	Background		
<b>PREREQUISITES</b>	No		
<b>TEACHING &amp; EXAMINATION LANGUAGE:</b>	English		

<b>COURSE OFFERED TO ERASMUSSTUDENTS:</b>	Yes
<b>COURSE URL:</b>	

## 2 LEARNING OUTCOMES

### Learning Outcomes

Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.

After the successful completion of the course, students will:

- know how to build medical terms
- know how to break down medical terms into word components and define each component
- have been familiarized with a great number of terms related to medicine
- have promoted their ability to comprehend medical texts
- have been acquainted with medical and layman's terms
- have been familiarized with medical abbreviations and acronyms
- have developed oral communication skills necessary for interaction in English speaking medical settings
- have improved their writing skills
- have improved academic skills such as notetaking, effective delivery of oral presentations, writing a research paper

### General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information, ICT Use, Adaptation to new situations, Decision making, Autonomous work, Teamwork, Working in an international environment, Working in an interdisciplinary environment, Production of new research ideas

Project design and management Equity and Inclusion, Respect for the natural environment, Sustainability, Demonstration of social, professional and moral responsibility and sensitivity to gender issues, Critical thinking, Promoting free, creative and inductive reasoning

Search, analysis and synthesis of data and information

Autonomous work

Teamwork

Working in an international environment

Adaptation to new situations

Decision making

Critical thinking

Promoting free, creative and inductive reasoning

Equity and Inclusion

Demonstration of social, professional and moral responsibility and sensitivity to gender issues

## 3 COURSE CONTENT

- The Cardiovascular System and the Blood
  - The Heart
  - Types of Blood Vessels

- Heart Sounds
- Blood
- Circuits
- Blood Pressure
- Blood Types
- Types of Arrhythmias
- Medical and Layman's Terms
- Acronyms
- Eponyms
- Abbreviations
- Homophones
- Words Easily Confused
- Idiomatic Expressions
- Mythonyms
- The Respiratory System
  - The Nose
  - The Pharynx
  - The Larynx
  - The Epiglottis
  - The Trachea
  - The Bronchi
  - The Lungs
  - The Alveoli
  - The Process of Respiration
  - Abnormal Chest Sounds
  - Pulmonary Injuries
  - Medical and Layman's Terms
  - Acronyms
  - Eponyms
  - Abbreviations
  - Homonyms
  - Homophones
  - Words Easily Confused
  - Idiomatic Expressions
  - Mythonyms
- The Urinary System
  - The Kidneys
  - The Nephrons
  - Blood Filtration
  - The Ureters
  - The Urinary Bladder
  - The Urethra

- Urine
- Renal Failure
- Conditions Related to Urination
- Medical and Layman's Terms
- Eponyms
- Abbreviations
- Homophones
- Words Easily Confused
- Idiomatic Expressions
- Mythonyms
- The Reproductive System
  - The Male Reproductive System
    - External Male Genitalia
    - Internal Male Genitalia
    - Sperm and Semen
    - Male Infertility
  - The Female Reproductive System
    - External Female Genitalia
    - Internal Female Genitalia
    - Menstruation
    - Menstrual Disorders
  - Sexually Transmitted Infections
  - Medical and Layman's Terms
  - Eponyms
  - Abbreviations
  - Words Easily Confused
  - Idiomatic Expressions
  - Mythonyms
- Midwifery
  - Midwifery Care
  - Gestation and Childbirth
  - Labour and Delivery
  - Types of Presentations in Labour
  - The Neonate
  - Lactation
  - Medical and Layman's Terms
  - Eponyms
  - Abbreviations
  - Words Easily Confused
  - Idiomatic Expressions

#### **4 LEARNING & TEACHING METHODS - EVALUATION**

<b>TEACHING METHOD</b> Face to face, Distance learning, etc.	Face to face												
<b>USE OF INFORMATION &amp; COMMUNICATIONS TECHNOLOGY (ICT)</b> Use of ICT in Teaching, in Laboratory Education, in Communication with students	Use of ICT in Teaching Use of ICT in Communication with students												
<b>TEACHING ORGANIZATION</b> The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study/creation, project, creation, project. Etc.  The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards	<table border="1" data-bbox="858 436 1406 795"> <thead> <tr> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Bibliographic research &amp; analysis</td> <td>26</td> </tr> <tr> <td>Speaking, listening &amp; writing activities</td> <td>26</td> </tr> <tr> <td>Research Project</td> <td>18</td> </tr> <tr> <td>Study</td> <td>20</td> </tr> <tr> <td><b>Total</b></td> <td><b>90</b></td> </tr> </tbody> </table>	Activity	Workload/semester	Bibliographic research & analysis	26	Speaking, listening & writing activities	26	Research Project	18	Study	20	<b>Total</b>	<b>90</b>
Activity	Workload/semester												
Bibliographic research & analysis	26												
Speaking, listening & writing activities	26												
Research Project	18												
Study	20												
<b>Total</b>	<b>90</b>												

<b>STUDENT EVALUATION</b> Description of the evaluation process  Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay/Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others  Please indicate all relevant information about the course assessment and how students are informed	<b>Student evaluation languages</b> English  <b>Method (Formative or Concluding)</b> Formative  <table border="1" data-bbox="810 1182 1465 1525"> <thead> <tr> <th>Student evaluation methods</th> <th>Percent</th> </tr> </thead> <tbody> <tr> <td>multiple choice test</td> <td>20</td> </tr> <tr> <td>short answer questions</td> <td>20</td> </tr> <tr> <td>matching exercise</td> <td>20</td> </tr> <tr> <td>cloze test</td> <td>20</td> </tr> <tr> <td>true/false questions</td> <td>20</td> </tr> </tbody> </table>	Student evaluation methods	Percent	multiple choice test	20	short answer questions	20	matching exercise	20	cloze test	20	true/false questions	20
Student evaluation methods	Percent												
multiple choice test	20												
short answer questions	20												
matching exercise	20												
cloze test	20												
true/false questions	20												

## 5 Suggested Bibliography

- Θεόνη Καβουρά, Ελένη Ναλμπάντη, Focus on the Language of Medicine in Health Sciences, Ιωάννης Κωνσταντάρας, 2022
- Γεώργιος Μιχαηλίδης, Νέλλη Βέζου-Μαγκούτη, Αγγλοελληνικό Ελληνοαγγλικό Λεξικό των Ιατρικών Όρων, Ιωάννης Κωνσταντάρας, 2005
- Turley M. Susan, Medical Language – Αγγλική Ορολογία για τις Επιστήμες Υγείας, Ιωάννης Κωνσταντάρας, 2020

## COURSE OUTLINE

### 1 GENERAL

<b>SCHOOL</b>	SCHOOL OF HEALTH SCIENCES		
<b>DEPARTMENT</b>	DEPARTMENT OF MEDICINE		
<b>LEVEL OF STUDIES</b>	ISCED level 6 – Bachelor’s or equivalent level		
<b>COURSE CODE</b>		<b>SEMESTER</b>	4
<b>COURSE TITLE</b>	ANATOMY II		
<b>TEACHING ACTIVITIES</b> If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labsetc. If the ECTS Credits are awarded to the whole course, then please indicate theteaching hours per week and the corresponding ECTS Credits.	<b>TEACHING HOURS PER WEEK</b>		<b>ECTS CREDITS</b>
	9		9.0
<b>COURSE TYPE</b> Background, General Knowledge, Scientific Area, Skill Development	Background		
<b>PREREQUISITES</b>	No		
<b>TEACHING &amp; EXAMINATION LANGUAGE:</b>	Greek		
<b>COURSE OFFERED TO ERASMUSSTUDENTS:</b>			
<b>COURSE URL:</b>			

### 2 LEARNING OUTCOMES

<p><b>Learning Outcomes</b> Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</p>
<p>With the successful completion of the course the student will be able to:</p> <ul style="list-style-type: none"> <li>• Know, understand and appropriately use medical and anatomical terminology, to describe the structure and form of the human body and to efficiently communicate in a medical setting.</li> <li>• Recognize and describe the structure and form of the nervous system parts (Central, Peripheral and Autonomous Nervous System) and define their topographical and functional relations with the other organs and systems of the human body</li> <li>• Recognize and describe the structure and form of the internal organs (viscera) of the gastrointestinal, respiratory, and male and female urinary and genital systems and define their topographical and functional relations with the other organs and systems of the human body</li> <li>• Combine and organize his/her anatomical knowledge and apply them in the clinical and diagnostic evaluation of the nervous system’s and internal organs’ diseases, and in the recognition of the anatomical structures with the different types of imaging techniques.</li> </ul>

### General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information, ICT Use, Adaptation to new situations, Decision making, Autonomous work, Teamwork, Working in an international environment, Working in an interdisciplinary environment, Production of new research ideas  
Project design and management Equity and Inclusion, Respect for the natural environment, Sustainability, Demonstration of social, professional and moral responsibility and sensitivity to gender issues, Critical thinking, Promoting free, creative and inductive reasoning

Adaptation to new situations  
Autonomous work  
Teamwork  
Critical thinking  
Promoting free, creative and inductive reasoning  
Communicate effectively in a medical environment

### 3 COURSE CONTENT

#### Lectures:

1. Central, Peripheral, and Autonomic Nervous System
2. Respiratory System
3. Digestive System
4. Male Reproductive System
5. Female Reproductive System

#### Laboratory practice on Anatomy I & II on cadavers (the subject of Anatomy I is considered known)

1. Introduction to cadaveric dissection
2. Neck and Thorax (superficial anatomy dissection of the anterior region)
3. Abdomen (superficial anatomy dissection of the anterior region)
4. Neck (deep anatomy dissection of the anterior region)
5. Head and Neck (superficial and deep anatomy dissection of the anterior region)
6. Thorax and Upper limb (axilla)
7. Upper limb (arm)
8. Lower limb (anterior, lateral, and medial region of the thigh)
9. Back -Lower limb (posterior region of the thigh)
10. Upper limb (forearm)
11. Lower limb (anterior region of the leg and foot)
12. Upper limb (wrist and hand)
13. Lower limb (posterior region of the leg and foot)

### 4 LEARNING & TEACHING METHODS - EVALUATION

<b>TEACHING METHOD</b>	Face to face
<b>USE OF INFORMATION &amp; COMMUNICATIONS TECHNOLOGY (ICT)</b>	Use of ICT in Teaching Use of ICT in Laboratory Education Use of ICT in Communication with students

### TEACHING ORGANIZATION

The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study/creation, project, creation, project. Etc.

The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards

Activity	Workload/semester
Lectures	104
Laboratory Practice	13
Supervised study on anatomical models	20
Supervised study on the digital anatomical table	20
Unsupervised study	100
<b>Total</b>	<b>257</b>

### STUDENT EVALUATION

Description of the evaluation process

Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay/Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others

Please indicate all relevant information about the course assessment and how students are informed

**Student evaluation languages:** Greek

**Method (Formative or Concluding):** Formative

Student evaluation methods	Percent
Oral final exam	100

Full attendance of the laboratory practice is mandatory. After successful oral assessment of the lab practice the student is eligible to participate in the final exam.

The students that pass the written midterm exam on the Central Nervous system are exempted from this subject in the final exam. The oral final exam is held at the end of the academic term.

## 5 SUGGESTED BIBLIOGRAPHY

19. Άγιος Α. Περιγραφική και Εφαρμοσμένη Ανατομική, Τόμοι, Α, Β, Γ & Δ., University Studio Press, 1997
20. Agur A.M., Dalley A.F., Grant's Ανατομία – Έγχρωμος Άτλας. Πασχαλίδης, 2012
21. Drake R.L., Vogl W., Mitchell A.W. Gray's Ανατομία. Πασχαλίδης, 2006
22. Gilroy A.M., Ανατομία του ανθρώπου. 2<sup>η</sup> έκδοση, 1<sup>η</sup> ελληνική έκδοση, Κωνσταντάρας 2017
23. Gilroy A.M., MacPherson B.R., Ross L.M., Voll M., Wesker K. Βασική Περιγραφική Ανατομική, I, II, III & IV, Πασχαλίδης, 2009
24. Gray's Anatomy - The Anatomic Basis of Clinical Practice. 41st Ed. Elsevier, 2016
25. Hansen J.T., Lambert D.R. Βασική Κλινική Ανατομία του Netter, Ανατομία I. Πασχαλίδης, 2011
26. Ellis H., Mahadevan V. Κλινική Ανατομική. Παρισιάνου, 2013
27. Marieb E, Wilhelm P B, Mallat J. Ανατομία, 8<sup>η</sup> εκδ., Ιατρικές Εκδόσεις Λαγός Δημήτριος
28. Moore K.L., Dalley A.F., Agur A.M. Κλινική Ανατομία. Πασχαλίδης, 2012
29. Netter F. Ανατομία του Ανθρώπου, Άτλας Βασικών Ιατρικών Επιστημών. Πασχαλίδης, 2004
30. Platzer W., Shiozava T., Fritsch H., Kuhnel W., Kahle W., Frotscher M., Schmitz F. Εγχειρίδιο Περιγραφικής Ανατομικής. 4<sup>η</sup> εκδ., Π.Χ. Πασχαλίδης, 2023
31. Rohen, Yokochi, Lutjen-Drecoll, Έγχρωμος Άτλας Ανατομικής του Ανθρώπου, 7<sup>η</sup> εκδ. Πασχαλίδης 2011
32. Schunke M., Schulte E., Schumacher U., Voll M., Wesker K. Βασική Περιγραφική Ανατομική I & II, Πασχαλίδης, 2007
33. Skandalakis J.E. Surgical Anatomy. The embryologic and Anatomic Basis of Modern Surgery. Paschalidis Medical Publications, 2004

34. Sobotta Άτλας Ανατομικής του Ανθρώπου. 22η Έκδοση – 6η Ελληνική Έκδοση, Παρισιάνου, 2010
35. Waschke J, Bockers T, Paulsen F., Sobotta Ανατομία, με έγχρωμο Άτλαντα, Π.Χ. Πασχαλίδης – Broken Hill Publishers, 2019
36. Winesky R. Snell’s Clinical Anatomy by regions. 10th ed. Wolters Kluwer, 2019

## COURSE OUTLINE

### 1 GENERAL

<b>SCHOOL</b>	SCHOOL OF HEALTH SCIENCES		
<b>DEPARTMENT</b>	DEPARTMENT OF MEDICINE		
<b>LEVEL OF STUDIES</b>	ISCED level 6 – Bachelor’s or equivalent level		
<b>COURSE CODE</b>		<b>SEMESTER</b>	4
<b>COURSE TITLE</b>	PHYSIOLOGY III		
<b>TEACHING ACTIVITIES</b> If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labsetc. If the ECTS Credits are awarded to the whole course, then please indicate theteaching hours per week and the corresponding ECTS Credits.		<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>
		4,4	5.0
<b>COURSE TYPE</b> Background, General Knowledge,Scientific Area, Skill Development	Scientific Area		
<b>PREREQUISITES</b>	No		
<b>TEACHING &amp; EXAMINATION LANGUAGE:</b>	Greek		
<b>COURSE OFFERED TO ERASMUSSTUDENTS:</b>			
<b>COURSE URL:</b>			

### 2 LEARNING OUTCOMES

#### Learning Outcomes

Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.

Upon successful completion of the course the student will be able to know and comprehend:

1. The Basic principles of functioning of the nervous system
2. Basic learning and memory mechanisms and generally the coordinating role of the central nervous system in terms of movement, higher functions, general and specific senses
3. The basic functions and physiology of the digestive system
4. The mechanisms of digestion and absorption of nutrients as well as representative disorders and diseases affecting the functioning of the digestive system
5. Representative pathological conditions and diseases associated with disorders of the functionality of the nervous and digestive system

### General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information, ICT Use, Adaptation to new situations, Decision making, Autonomous work, Teamwork, Working in an international environment, Working in an interdisciplinary environment, Production of new research ideas

Project design and management Equity and Inclusion, Respect for the natural environment, Sustainability, Demonstration of social, professional and moral responsibility and sensitivity to gender issues, Critical thinking, Promoting free, creative and inductive reasoning

- Search, analysis and synthesis of data and information
- Decision making
- Autonomous work
- Teamwork
- Project design
- Critical thinking,
- Promoting free, creative and inductive reasoning

## 3 COURSE CONTENT

Theoretical:

- **NERVOUS SYSTEM:** Basic structure of the Nervous System – Cerebrospinal Fluid, Nervous System Functions, Sensory System, CNS sensory transmission pathways, Reticular shape- motor pathways, basal ganglia: structure, role, lesions, cerebellum: structure, role, lesions, Posture control, Hypothalamus – Limbic system. The cortex of the hemispheres: structure, basic functions of lobes, EEG: types of brain waves, rhythms, Sleep - Wakefulness - Balance – Orientation – Vestibular system, Taste – Smell, Vision, Auditory pathways. Higher functions: learning and memory.
- **DIGESTIVE SYSTEM:** The gastrointestinal tract - Secretions and functions. The role of the liver – metabolism – disorders, Digestion and absorption in the small intestine. Digestion of lipids, carbohydrates, protein, vitamins, water and soluble substances.

Laboratory exercises

1. Nervous system
2. Physiology of nerve impulse
3. Digestive system
4. Physical and chemical processes of digestion

## 4 LEARNING & TEACHING METHODS - EVALUATION

<b>TEACHING METHOD</b> Face to face, Distance learning, etc.	Face to face Distance Learning (when applicable)
<b>USE OF INFORMATION &amp; COMMUNICATIONS TECHNOLOGY (ICT)</b> Use of ICT in Teaching, in Laboratory Education, in Communication with students	Use of ICT in Teaching Use of ITC in Laboratory Education Use of ICT in Communication with students

<p><b>TEACHING ORGANIZATION</b></p> <p>The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research &amp; analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study/creation, project, creation, project. Etc.</p> <p>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards</p>	<table border="1"> <thead> <tr> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>52</td> </tr> <tr> <td>Laboratory Exercises</td> <td>8</td> </tr> <tr> <td>Study, Bibliographic research and analysis</td> <td>90</td> </tr> <tr> <td><b>Total</b></td> <td><b>150</b></td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	52	Laboratory Exercises	8	Study, Bibliographic research and analysis	90	<b>Total</b>	<b>150</b>
Activity	Workload/semester										
Lectures	52										
Laboratory Exercises	8										
Study, Bibliographic research and analysis	90										
<b>Total</b>	<b>150</b>										

<p><b>STUDENT EVALUATION</b></p> <p>Description of the evaluation process</p> <p>Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay/Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others</p> <p>Please indicate all relevant information about the course assessment and how students are informed</p>	<p><b>Student evaluation languages</b></p> <p>Greek</p> <p><b>Method (Formative or Concluding)</b></p> <p>Formative</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Student evaluation methods</th> <th>Percent</th> </tr> </thead> <tbody> <tr> <td>Written exam with multiple choice test</td> <td>20</td> </tr> <tr> <td>Oral exam</td> <td>80</td> </tr> </tbody> </table>	Student evaluation methods	Percent	Written exam with multiple choice test	20	Oral exam	80
Student evaluation methods	Percent						
Written exam with multiple choice test	20						
Oral exam	80						

## 5 Suggested Bibliography

- PowerPoint presentations (e-class)
- Relevant bibliography from PubMed and other websites presented and renewed annually
- Suggested books:
  9. Human Physiology: An Integrated Approach, 8th edition, Dee Unglaub Silverthorn University of Texas, Austin, Published by Pearson (January 3rd 2018) - Copyright © 2019, ISBN 9781292259543
  10. Introduction to Human Physiology, Lauralee Sherwood, 8th edition, 2017, Brooks/COLE, Cengage Learning, ISBN 9781133104544
  11. Medical Physiology, W. Boron & E. Boulpaep, 3rd Edition, 2017, Elsevier, ISBN 9781455743773
  12. Physiology, L. Costanzo, 6th edition, 2018, Elsevier, ISBN 9780323478816

## COURSE OUTLINE

### 1 GENERAL

<b>SCHOOL</b>	SCHOOL OF HEALTH SCIENCES		
<b>DEPARTMENT</b>	DEPARTMENT OF MEDICINE		
<b>LEVEL OF STUDIES</b>	ISCED level 6 – Bachelor’s or equivalent level		
<b>COURSE CODE</b>		<b>SEMESTER</b>	4
<b>COURSE TITLE</b>	PHARMACOLOGY I		
<b>TEACHING ACTIVITIES</b> If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labsetc. If the ECTS Credits are awarded to the whole course, then please indicate theteaching hours per week and the corresponding ECTS Credits.		<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>
		5.5	6.0
<b>COURSE TYPE</b> Background, General Knowledge, Scientific Area, Skill Development	General Background		
<b>PREREQUISITES</b>	No		
<b>TEACHING &amp; EXAMINATION LANGUAGE:</b>	Greek		
<b>COURSE OFFERED TO ERASMUSSTUDENTS:</b>			
<b>COURSE URL:</b>			

### 2 LEARNING OUTCOMES

<p><b>Learning Outcomes</b> Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</p>
<p>Upon successful completion of the course the student will be able to:</p> <ul style="list-style-type: none"> <li>- Know, understand and use medical terminology relating to the administration of pharmaceutical substances and preparations appropriately.</li> <li>- Know and understand the basic principles of pharmacokinetics, pharmacodynamics and drug interactions.</li> <li>- Know, understand and evaluate of the various types of clinical studies preceding the marketing of medicinal products and pharmacovigilance.</li> </ul>

<p><b>General Skills</b> Name the desirable general skills upon successful completion of the module</p> <p>Search, analysis and synthesis of data and information, ICT Use, Adaptation to new situations, Decision making, Autonomous work, Teamwork, Working in an international environment, Working in an interdisciplinary environment, Production of new research ideas</p>
--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Project design and management Equity and Inclusion, Respect for the natural environment, Sustainability, Demonstration of social, professional and moral responsibility and sensitivity to gender issues, Critical thinking, Promoting free, creative and inductive reasoning

Search, analysis and synthesis of data and information, ICT Use.

Decision-making

Autonomous work

teamwork

Working in an international environment

Working in an interdisciplinary environment

Promoting free, creative and deductive thinking

Adapting to new situations

Generating new research ideas

### 3 COURSE CONTENT

1. Introduction to Pharmacology
2. Fundamentals of Pharmacology
3. Administration of medicines
4. Drug development
5. Clinical trials
6. Absorption/Distribution
7. Metabolism/Drug excretion
8. Pharmacodynamics I
9. Pharmacodynamics II
10. Population pharmacodynamics
11. CNS - General/Anti-Parkinsonian
12. ANS - General, Choline. St. /Antac
13. Drug Interactions
14. Adrenergic Agents
15. Anxiolytics
16. Antiepileptics
17. Antidepressants
18. Antipsychotics
19. Opioids
20. Addiction
21. Individualised pharmacotherapy
22. Biological Therapies-Principles-Development
23. Fundamentals of gene therapy

Laboratories or tutorials or clinical training

1. Clinical Study

2. Drug administration

3. Exercise. Pharmacokinetics

4. Pharmacodynamics - Binding

5. Presentations / Clinical Study Papers

### 4 LEARNING & TEACHING METHODS - EVALUATION

<p><b>TEACHING METHOD</b> Face to face, Distance learning, etc.</p>	<p>Face to face</p>
<p><b>USE OF INFORMATION &amp; COMMUNICATIONS TECHNOLOGY (ICT)</b> Use of ICT in Teaching, in Laboratory Education, in Communication with students</p>	<p>Use of ICT in Teaching Use of ICT in Communication with students</p>

**TEACHING ORGANIZATION**

The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study/creation, project, creation, project. Etc.

The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards

Activity	Workload/semester
Lectures	52
Laboratory Exercise	16
Tutoring	4
Unguided study	100
<b>Total</b>	<b>172</b>

**STUDENT EVALUATION**

Description of the evaluation process

Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay/Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others

Please indicate all relevant information about the course assessment and how students are informed

**Student evaluation languages**

Greek

**Method (Formative or Concluding)**

Formative

Student evaluation methods	Percent
Written exam with essay answer questions	100

Exams are held at the end of the semester. Prerequisite for participating in the written exams is the successful attendance of the laboratory exercises

**5 Suggested Bibliography**

1. Brenner and Steven's Pharmacology

Version: 1/2023

Authors: Stevens C.W.

ISBN: 9789963274956

Publisher: BROKEN HILL PUBLISHERS LTD

2. BASIC PHARMACOLOGY

Edition: 1/2022

Authors: DEMETRIOS KOUVELAS

ISBN: 9786185288686

Publisher.

3. BASIC PHARMACOLOGY

Edition: 7/2023

Authors: HARVEY A. RICHARD, KAREN WHALEN, RICH.FINKEL, TH.A. PANAVELIL

ISBN: 9789605837310

Publisher: PARISIANOU MONOPROZOPI ANONYMOUS PUBLISHING, IMPORTING AND TRADING COMPANY FOR SCIENTIFIC BOOKS.

## COURSE OUTLINE

### 1 GENERAL

<b>SCHOOL</b>	SCHOOL OF HEALTH SCIENCES		
<b>DEPARTMENT</b>	DEPARTMENT OF MEDICINE		
<b>LEVEL OF STUDIES</b>	ISCED level 6 – Bachelor’s or equivalent level		
<b>COURSE CODE</b>		<b>SEMESTER</b>	4
<b>COURSE TITLE</b>	SOCIAL MEDICINE		
<b>TEACHING ACTIVITIES</b> If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labsetc. If the ECTS Credits are awarded to the whole course, then please indicate theteaching hours per week and the corresponding ECTS Credits.	<b>TEACHING HOURS PER WEEK</b>		<b>ECTS CREDITS</b>
	4		5.0
<b>COURSE TYPE</b> Background, General Knowledge, Scientific Area, Skill Development	Scientific Area		
<b>PREREQUISITES</b>	No		
<b>TEACHING &amp; EXAMINATION LANGUAGE:</b>	Greek		
<b>COURSE OFFERED TO ERASMUSSTUDENTS:</b>			
<b>COURSE URL:</b>			

### 2 LEARNING OUTCOMES

<b>Learning Outcomes</b> Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.
<p>Learning outcomes of this course are the following:</p> <ul style="list-style-type: none"> <li>- Introduction to the basic principles of Public Health -Social Medicine and Preventive Medicine</li> <li>- Analysis of the effect of different socio- economic parameters on the health of different populations (Social determinants of health), emphasizing on the effect of inequalities in health</li> <li>- Epidemiology and Research methodology</li> <li>- Clinical epidemiology</li> <li>- Medical Demography,</li> <li>- Evaluating the burden of disease (BoD) of different conditions using epidemiological methods</li> </ul>

<b>General Skills</b> Name the desirable general skills upon successful completion of the module
-----------------------------------------------------------------------------------------------------

Search, analysis and synthesis of data and information, ICT Use, Adaptation to new situations, Decision making, Autonomous work, Teamwork, Working in an international environment, Working in an interdisciplinary environment, Production of new research ideas

Project design and management Equity and Inclusion, Respect for the natural environment, Sustainability, Demonstration of social, professional and moral responsibility and sensitivity to gender issues, Critical thinking, Promoting free, creative and inductive reasoning

Search, analysis and synthesis of data and information,

Adaptation to new situations

Decision making

Autonomous work

Teamwork

Working in an international environment

Working in an interdisciplinary environment

Project design and management

Equity and Inclusion

Demonstration of social, professional and moral responsibility and sensitivity to gender issues

Critical thinking

Communicate effectively in a medical environment

### 3 COURSE CONTENT

- Social and environmental related determinants of health (and disease)
- Inequalities in health
- Practicing Medicine at a population level
- Investigation of the social determinants of morbidity and mortality
- Research methodology in Social Medicine and Public Health
- Levels of prevention
- Education and Promotion of Health within the Community and in collaboration with Community agencies
- Inequalities in health
- Health care systems and services
- Non-communicable diseases epidemiology (Cancer epidemiology, cardiovascular disease epidemiology, injury epidemiology)
- Nutrition epidemiology

### 4 LEARNING & TEACHING METHODS - EVALUATION

<b>TEACHING METHOD</b> Face to face, Distance learning, etc.	Face to face
<b>USE OF INFORMATION &amp; COMMUNICATIONS TECHNOLOGY (ICT)</b> Use of ICT in Teaching, in Laboratory Education, in Communication with students	Use of ICT in Teaching Use of ICT in Communication with students

**TEACHING ORGANIZATION**

The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study/creation, project, creation, project. Etc.

The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standard

Activity	Workload/semester
Lectures	52
Bibliographic research & analysis	80
<b>Total</b>	<b>132</b>

**STUDENT EVALUATION**

Description of the evaluation process

Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay/Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others

Please indicate all relevant information about the course assessment and how students are informed

**Student evaluation languages**

English

**Method (Formative or Concluding)**

Formative

Student evaluation methods	Percent
Written exam with multiple choice test	50
Written exam with short answer questions	50

**5 Suggested Bibliography**

1. Clinical Epidemiology. The essentials, R. Fletcher, S. Fletcher, G. Fletcher Wolters Kluwer Eds (6<sup>th</sup> Edition)
2. Medical Sociology. WC Cockerham. Routledge Eds (14<sup>th</sup> Edition)

## COURSE OUTLINE

### 1 GENERAL

<b>SCHOOL</b>	SCHOOL OF HEALTH SCIENCES		
<b>DEPARTMENT</b>	DEPARTMENT OF MEDICINE		
<b>LEVEL OF STUDIES</b>	ISCED level 6 – Bachelor’s or equivalent level		
<b>COURSE CODE</b>		<b>SEMESTER</b>	4
<b>COURSE TITLE</b>	ENGLISH FOR MEDICINE IV		
<b>TEACHING ACTIVITIES</b> If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labsetc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.		<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>
		4	3.0
<b>COURSE TYPE</b> Background, General Knowledge, Scientific Area, Skill Development	Background		
<b>PREREQUISITES</b>	No		
<b>TEACHING &amp; EXAMINATION LANGUAGE:</b>	Greek		
<b>COURSE OFFERED TO ERASMUS STUDENTS:</b>			
<b>COURSE URL:</b>			

### 2 LEARNING OUTCOMES

<p><b>Learning Outcomes</b> Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</p>
<p>After the successful completion of the course, students will:</p> <ul style="list-style-type: none"> <li>- know how to build medical terms</li> <li>- know how to break down medical terms into word components and define each component</li> <li>- have been familiarized with a great number of terms related to medicine</li> <li>- have promoted their ability to comprehend medical texts</li> <li>- have been acquainted with medical and layman’s terms</li> <li>- have been familiarized with medical abbreviations and acronyms</li> <li>- have developed oral communication skills necessary for interaction in English speaking medical settings</li> <li>- have improved their writing skills</li> <li>- have improved academic skills such as notetaking, effective delivery of oral presentations, writing a research paper</li> </ul>
<p><b>General Skills</b></p> <p>Name the desirable general skills upon successful completion of the module</p> <p>Search, analysis and synthesis of data and information, ICT Use, Adaptation to new situations, Decision making,</p>

Autonomous work, Teamwork, Working in an international environment, Working in an interdisciplinary environment, Production of new research ideas  
Project design and management Equity and Inclusion, Respect for the natural environment, Sustainability, Demonstration of social, professional and moral responsibility and sensitivity to gender issues, Critical thinking, Promoting free, creative and inductive reasoning

Search, analysis and synthesis of data and information  
Autonomous work  
Teamwork  
Working in an international environment  
Adaptation to new situations  
Decision making  
Critical thinking  
Promoting free, creative and inductive reasoning  
Equity and Inclusion  
Demonstration of social, professional and moral responsibility and sensitivity to gender issues

### 3 COURSE CONTENT

- The Gastrointestinal System
  - The Oesophagus
  - The Stomach
  - The Small Intestine
  - The Large Intestine
  - The Liver
  - The Gallbladder
  - The Pancreas
  - The Stages of Digestion
  - Peptic Ulcers
  - Medical and Layman's Terms
  - Acronyms
  - Eponyms
  - Abbreviations
  - Homonyms
  - Homophones
  - Words Easily Confused
  - Idiomatic Expressions
- The Integumentary System
  - The Skin
  - The Sebaceous and Sudoriferous Glands
  - The Hair
  - The Nails
  - Skin Lesions
  - Medical and Layman's Terms
  - Eponyms
  - Abbreviations
  - Words Easily Confused
  - Idiomatic Expressions
- The Eye
  - The Structure of the Eye
  - Vision
  - Common Eye Diseases and Disorders

- Medical and Layman's Terms
- Eponyms
- Abbreviations
- Homonyms
- Words Easily Confused
- Idiomatic Expressions
- Mythonyms
- The Ear
  - The Outer Ear
  - The Middle Ear
  - The Inner Ear
  - The Vestibular System
  - Hearing
  - Types of Ear Infections
  - Medical and Layman's Terms
  - Eponyms
  - Abbreviations
  - Homophones
  - Words Easily Confused
  - Idiomatic Expressions
  - Mythonyms
- Medical History Taking and Physical Examination
  - Taking a History
    - History of Presenting Complaint
    - Past Medical History
    - Drug History
    - Family History
    - Social History
    - Review of Systems
    - The SOCRATES acronym used for the assessment of pain
    - Abbreviations and Acronyms Used in Medical History Taking
  - Physical Examination
    - Examining the Patient
    - Instructing the Patient
    - Reassuring the Patient
    - Showing Sensitivity
    - Basic Examination Positions
    - Instruments and Pieces of Equipment Used in a Physical Examination
- Pharmacy Pharmacology and Drugs
  - Drug Nomenclature
  - Sources of Drugs
  - Dose and Dosage
  - Forms of Drugs
  - Routes of Administration
  - Prescription Abbreviations
  - Words Easily Confused
- Bioethics
  - The Principles of Bioethics
  - Ethical Decision Making
  - The Hippocratic Oath
  - Case Studies
  - Conference Presentations / Writing a Medical Article

#### 4 LEARNING & TEACHING METHODS - EVALUATION

<b>TEACHING METHOD</b> Face to face, Distance learning, etc.	Face to face												
<b>USE OF INFORMATION &amp; COMMUNICATIONS TECHNOLOGY (ICT)</b> Use of ICT in Teaching, in Laboratory Education, in Communication with students	Use of ICT in Teaching Use of ICT in Communication with students												
<b>TEACHING ORGANIZATION</b> The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study/creation, project, creation, project. Etc.  The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards	<table border="1"> <thead> <tr> <th data-bbox="858 477 1120 533">Activity</th> <th data-bbox="1120 477 1406 533">Workload/semester</th> </tr> </thead> <tbody> <tr> <td data-bbox="858 533 1120 645">Bibliographic research &amp; analysis</td> <td data-bbox="1120 533 1406 645">26</td> </tr> <tr> <td data-bbox="858 645 1120 712">Speaking, listening &amp; writing activities</td> <td data-bbox="1120 645 1406 712">26</td> </tr> <tr> <td data-bbox="858 712 1120 757">Research Project</td> <td data-bbox="1120 712 1406 757">18</td> </tr> <tr> <td data-bbox="858 757 1120 790">Study</td> <td data-bbox="1120 757 1406 790">20</td> </tr> <tr> <td data-bbox="858 790 1120 846"><b>Total</b></td> <td data-bbox="1120 790 1406 846"><b>90</b></td> </tr> </tbody> </table>	Activity	Workload/semester	Bibliographic research & analysis	26	Speaking, listening & writing activities	26	Research Project	18	Study	20	<b>Total</b>	<b>90</b>
Activity	Workload/semester												
Bibliographic research & analysis	26												
Speaking, listening & writing activities	26												
Research Project	18												
Study	20												
<b>Total</b>	<b>90</b>												

<b>STUDENT EVALUATION</b> Description of the evaluation process  Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay/Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others  Please indicate all relevant information about the course assessment and how students are informed	<b>Student evaluation languages</b> Greek  <b>Method (Formative or Concluding)</b> Formative  <table border="1"> <thead> <tr> <th data-bbox="810 1126 1174 1211">Student evaluation methods</th> <th data-bbox="1174 1126 1465 1211">Percent</th> </tr> </thead> <tbody> <tr> <td data-bbox="810 1211 1174 1267">multiple choice test</td> <td data-bbox="1174 1211 1465 1267">20</td> </tr> <tr> <td data-bbox="810 1267 1174 1312">short answer questions</td> <td data-bbox="1174 1267 1465 1312">20</td> </tr> <tr> <td data-bbox="810 1312 1174 1357">matching exercise</td> <td data-bbox="1174 1312 1465 1357">20</td> </tr> <tr> <td data-bbox="810 1357 1174 1413">short essay</td> <td data-bbox="1174 1357 1465 1413">40</td> </tr> </tbody> </table>	Student evaluation methods	Percent	multiple choice test	20	short answer questions	20	matching exercise	20	short essay	40
Student evaluation methods	Percent										
multiple choice test	20										
short answer questions	20										
matching exercise	20										
short essay	40										

#### 5 Suggested Bibliography

- Θεώνη Καβουρά, Ελένη Ναλμπάντη, Focus on the Language of Medicine in Health Sciences, Ιωάννης Κωνσταντάρας, 2022
- Κατούλης Α., Dorland's Ιατρικό Λεξικό – Αγγλοελληνικό & Ελληνοαγγλικό, BROKEN HILL PUBLISHERS LTD, 1997
- Allan D., Lockyer K., Αγγλική Ορολογία στις Βιοϊατρικές Επιστήμες, BROKEN HILL PUBLISHERS LTD, 2018
- Sheiland B., Εξειδικευμένη Αγγλική Ορολογία Επιστημών Υγείας, BROKEN HILL PUBLISHERS LTD, 2019
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## COURSE OUTLINE

### 1 GENERAL

<b>SCHOOL</b>	SCHOOL OF HEALTH SCIENCES		
<b>DEPARTMENT</b>	DEPARTMENT OF MEDICINE		
<b>LEVEL OF STUDIES</b>	ISCED level 6 – Bachelor’s or equivalent level		
<b>COURSE CODE</b>		<b>SEMESTER</b>	5
<b>COURSE TITLE</b>	CLINICAL DIAGNOSIS		
<b>TEACHING ACTIVITIES</b> If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labsetc. If the ECTS Credits are awarded to the whole course, then please indicate theteaching hours per week and the corresponding ECTS Credits.		<b>TEACHING HOURS PERWEEK</b>	<b>ECTS CREDITS</b>
		6	6.0
<b>COURSE TYPE</b> Background, General Knowledge, Scientific Area, Skill Development	Scientific Area		
<b>PREREQUISITES</b>	No		
<b>TEACHING &amp; EXAMINATION LANGUAGE:</b>	Greek		
<b>COURSE OFFERED TO ERASMUSSTUDENTS:</b>			
<b>COURSE URL:</b>			

### 2 LEARNING OUTCOMES

<p><b>Learning Outcomes</b> Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</p> <p>The educational objectives of the course include:</p> <ul style="list-style-type: none"> <li>• Building a methodology to approach a patient and elicit a complete history through lectures and clinical practice with hospitalized patients</li> <li>• Developing skills related to physical examination and learning of physical signs and symptoms per organ system through lectures and clinical practice with hospitalized patients</li> <li>• Relating theoretical knowledge with clinical paradigms through clinical practice with hospitalized patients</li> </ul>
<p><b>General Skills</b></p> <p>Name the desirable general skills upon successful completion of the module</p> <p>Search, analysis and synthesis of data and information, ICT Use, Adaptation to new situations, Decision making,</p>

Autonomous work, Teamwork, Working in an international environment, Working in an interdisciplinary environment, Production of new research ideas  
Project design and management Equity and Inclusion, Respect for the natural environment, Sustainability, Demonstration of social, professional and moral responsibility and sensitivity to gender issues, Critical thinking, Promoting free, creative and inductive reasoning

Autonomous work  
Teamwork  
Equity and Inclusion  
Demonstration of social, professional and moral responsibility and sensitivity to gender issues  
Critical thinking  
Promoting free, creative and inductive reasoning  
Examining a patient  
Evaluate clinical cases  
Communicate effectively in a medical environment  
Apply scientific principles, methods and knowledge to medical practice and research

### 3 COURSE CONTENT

#### **Theoretical background:**

- History- General symptoms and clinical information
- Symptoms of respiratory diseases
- Clinical examination of the respiratory system
- Diseases of the respiratory system from a clinical diagnosis perspective
- Symptoms of circulatory diseases
- Clinical examination of the circulatory system
- Diseases of the circulatory system from a clinical diagnosis perspective
- Symptoms of gastrointestinal diseases
- Clinical examination of the gastrointestinal system
- Diseases of the gastrointestinal system from a clinical diagnosis perspective
- Symptoms of musculoskeletal diseases
- Clinical examination of the musculoskeletal system
- Symptoms of haematopoietic diseases
- Clinical examination of the haematopoietic system
- Symptoms of endocrine diseases
- Clinical examination of the endocrine system
- Symptoms of urinary diseases
- Clinical examination of the urinary system
- Clinical diagnosis and resuscitation of the critically ill patient

#### **Clinical Practice:**

- History taking
- Vital signs
- Clinical examination of the head and neck
- Observation- Percussion- Palpation- Auscultation of the chest
- Clinical examination of the heart
- Clinical examination of the arteries, veins and lymphatic vessels
- Observation- Percussion- Palpation- Auscultation of the abdomen
- Clinical examination of the lymph nodes

- Clinical examination of the skin and mammary glands
- Clinical examination of the urinary system
- Clinical examination of the musculoskeletal system

#### 4 LEARNING & TEACHING METHODS - EVALUATION

<b>TEACHING METHOD</b> Face to face, Distance learning, etc.	Face to face														
<b>USE OF INFORMATION &amp; COMMUNICATIONS TECHNOLOGY (ICT)</b> Use of ICT in Teaching, in Laboratory Education, in Communication with students	Use of ICT in Teaching Use of ICT in Communication with students														
<b>TEACHING ORGANIZATION</b> The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study/creation, project, creation, project. Etc.  The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards	<table border="1"> <thead> <tr> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>52</td> </tr> <tr> <td>Clinical practice</td> <td>26</td> </tr> <tr> <td>Study of course material (slides, notes)</td> <td>18</td> </tr> <tr> <td>Study of suggested textbooks</td> <td>80</td> </tr> <tr> <td>Study of scientific articles</td> <td>4</td> </tr> <tr> <td><b>Total</b></td> <td><b>180</b></td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	52	Clinical practice	26	Study of course material (slides, notes)	18	Study of suggested textbooks	80	Study of scientific articles	4	<b>Total</b>	<b>180</b>
Activity	Workload/semester														
Lectures	52														
Clinical practice	26														
Study of course material (slides, notes)	18														
Study of suggested textbooks	80														
Study of scientific articles	4														
<b>Total</b>	<b>180</b>														

<b>STUDENT EVALUATION</b> Description of the evaluation process  Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay/Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others  Please indicate all relevant information about the course assessment and how students are informed	<b>Student evaluation languages</b> Greek  <b>Method (Formative or Concluding)</b> Formative  <table border="1"> <thead> <tr> <th>Student evaluation methods</th> <th>Percent</th> </tr> </thead> <tbody> <tr> <td>Written exam with multiple choice test</td> <td>80</td> </tr> <tr> <td>Written exam with short answer questions</td> <td>20</td> </tr> </tbody> </table> Full attendance of clinical practice courses is a prerequisite for participation in the exams	Student evaluation methods	Percent	Written exam with multiple choice test	80	Written exam with short answer questions	20
Student evaluation methods	Percent						
Written exam with multiple choice test	80						
Written exam with short answer questions	20						

#### 5 Suggested Bibliography

Book: Bates' Guide to Physical Examination and History Taking 13<sup>th</sup> Edition, 2020  
Journal: New England Journal of Medicine  
Web: [www.medscape.com/internalmedicine](http://www.medscape.com/internalmedicine)

## COURSE OUTLINE

### 1 GENERAL

<b>SCHOOL</b>	SCHOOL OF HEALTH SCIENCES		
<b>DEPARTMENT</b>	DEPARTMENT OF MEDICINE		
<b>LEVEL OF STUDIES</b>	ISCED level 6 – Bachelor’s or equivalent level		
<b>COURSE CODE</b>		<b>SEMESTER</b>	5
<b>COURSE TITLE</b>	PATHOPHYSIOLOGY I		
<b>TEACHING ACTIVITIES</b> If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labsetc. If the ECTS Credits are awarded to the whole course, then please indicate theteaching hours per week and the corresponding ECTS Credits.		<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>
		4	4.0
<b>COURSE TYPE</b> Background, General Knowledge, Scientific Area, Skill Development	Scientific Area		
<b>PREREQUISITES</b>	No		
<b>TEACHING &amp; EXAMINATION LANGUAGE:</b>	Greek		
<b>COURSE OFFERED TO ERASMUSSTUDENTS:</b>			
<b>COURSE URL:</b>			

### 2 LEARNING OUTCOMES

<p><b>Learning Outcomes</b> Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</p>
<ul style="list-style-type: none"> <li>• Understanding of the shared pathogenic pathways &amp; mechanisms that characterize different groups of complex diseases</li> <li>• Development of critical thinking skills to assist differential diagnosis based on various disease-related mechanisms</li> <li>• Inspiration of the concept of “translational research” (from biology to patient care) in young students</li> </ul>

<p><b>General Skills</b></p> <p>Name the desirable general skills upon successful completion of the module</p> <p>Search, analysis and synthesis of data and information, ICT Use, Adaptation to new situations, Decision making, Autonomous work, Teamwork, Working in an international environment, Working in an interdisciplinary environment, Production of new research ideas</p> <p>Project design and management Equity and Inclusion, Respect for the natural environment, Sustainability, Demonstration of social, professional and moral responsibility and sensitivity to gender issues, Critical thinking, Promoting free, creative</p>
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and inductive reasoning

Autonomous work  
Teamwork  
Promoting free, creative and inductive reasoning  
Apply scientific principles, methods and knowledge to medical practice and research  
Production of new research ideas  
Demonstration of social, professional and moral responsibility and sensitivity to gender issues

### 3 COURSE CONTENT

- Introduction to pathophysiology - Mechanisms of disease - Translational medicine
- Immune response - Innate immunity
- Immune response - Adaptive immunity
- Immunology of thrombosis and fibrosis
- Systemic inflammatory response
- Autoimmunity - Disease models
- Mechanisms of arthritis and vasculitis
- Pathogenetic mechanisms: Gastritis - Peptic ulcer
- Pathogenetic mechanisms: Hyperplastic/Neoplastic colon diseases
- Pathophysiology of liver and biliary diseases I
- Pathophysiology of liver and biliary diseases II
- Pathogenetic mechanisms of pancreatitis
- Inflammatory bowel diseases (IBDs)
- Metabolism
- Pathophysiology of arterial hypertension
- Structure and function of kidneys
- More frequent and more serious kidney problems – Approach
- Fluid balance, electrolytes, acid-base balance
- Acute and chronic renal failure
- Glomerular diseases and pathophysiology of findings
- Hereditary kidney diseases – Tubulointerstitial diseases
- Pathophysiology of anemias
- Regulation of myelopoiesis
- Mechanisms of bone marrow failure
- Lymphoproliferative diseases and plasma cell dyscrasias
- Coagulation disorders

### 4 LEARNING & TEACHING METHODS - EVALUATION

<b>TEACHING METHOD</b> Face to face, Distance learning, etc.	Face to face
<b>USE OF INFORMATION &amp; COMMUNICATIONS TECHNOLOGY (ICT)</b> Use of ICT in Teaching, in Laboratory Education, in Communication with students	Use of ICT in Teaching Use of ICT in Communication with students

**TEACHING ORGANIZATION**

The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study/creation, project, creation, project. Etc.

The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards

Activity	Workload/semester
Lectures	26
Study of course material (slides, notes)	20
Study of suggested textbooks	60
Study of scientific articles	14
<b>Total</b>	<b>120</b>

**STUDENT EVALUATION**

Description of the evaluation process

Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay/Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others

Please indicate all relevant information about the course assessment and how students are informed

**Student evaluation languages**

Greek

**Method (Formative or Concluding)**

Formative

Student evaluation methods	Percent
Written exam with multiple choice test	90
Written exam with short answer questions	10

**5 Suggested Bibliography****Books:**

- A) Introduction to Human Disease: Pathophysiology for Health Professionals by Agnes G. Loeffler, Michael N. Hart  
 B) Cellular and Molecular Immunology. Abul K. Abbas, Andrew H. Lichtman, and Shiv Pillai.

**Journals:**

Nature Medicine

Journal of Clinical Investigation

## COURSE OUTLINE

### 1 GENERAL

<b>SCHOOL</b>	SCHOOL OF HEALTH SCIENCES		
<b>DEPARTMENT</b>	DEPARTMENT OF MEDICINE		
<b>LEVEL OF STUDIES</b>	ISCED level 6 – Bachelor’s or equivalent level		
<b>COURSE CODE</b>		<b>SEMESTER</b>	5
<b>COURSE TITLE</b>	GENERAL PATHOLOGY		
<b>TEACHING ACTIVITIES</b> If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labsetc. If the ECTS Credits are awarded to the whole course, then please indicate theteaching hours per week and the corresponding ECTS Credits.		<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>
		5	5.0
<b>COURSE TYPE</b> Background, General Knowledge, Scientific Area, Skill Development	Scientific area		
<b>PREREQUISITES</b>	No		
<b>TEACHING &amp; EXAMINATION LANGUAGE:</b>	Greek		
<b>COURSE OFFERED TO ERASMUSSTUDENTS:</b>			
<b>COURSE URL:</b>			

### 2 LEARNING OUTCOMES

<p><b>Learning Outcomes</b> Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</p>
<p>After successful completion of the General Pathology course, medical students will: Understand the pathogenic mechanisms of diseases Be able to Interpret the clinical manifestation of diseases Have developed the necessary skills for elaborating on the differential diagnosis of diseases</p>

<p><b>General Skills</b> Name the desirable general skills upon successful completion of the module</p> <p>Search, analysis and synthesis of data and information, ICT Use, Adaptation to new situations, Decision making, Autonomous work, Teamwork, Working in an international environment, Working in an interdisciplinary environment, Production of new research ideas Project design and management Equity and Inclusion, Respect for the natural environment, Sustainability, Demonstration of social, professional and moral responsibility and sensitivity to gender issues, Critical thinking, Promoting free, creative</p>
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and inductive reasoning

Search, analysis and synthesis of data and information  
Decision making  
Autonomous work,  
Teamwork  
Production of new research ideas  
Critical thinking

### 3 COURSE CONTENT

Theoretical knowledge:

1. Morphological manifestations of the cellular damage
2. Morphological alterations of the extracellular matrix
3. Acute inflammatory response
4. Healing and regeneration process
5. Chronic inflammation
6. Immunological response
7. Immune defense disorders
8. Infection
9. Atherosclerosis
10. Thrombosis
11. Embolism and infarction
12. Cellular growth and differentiation
13. Neoplasia
14. Carcinogenesis and Carcinogenic agents
15. Carcinogenesis – Molecular pathways
16. Cancer diagnosis

Laboratory experience:

1. Macroscopic examination of surgical samples
2. Selection of tissue areas for microscopic examination
3. Fixation techniques and tissue processing
4. Tissue embedding, microtomes, tissue section mounting on slides
5. Histochemistry, immunohistochemistry and molecular techniques

### 4 LEARNING & TEACHING METHODS - EVALUATION

<b>TEACHING METHOD</b> Face to face, Distance learning, etc.	Face to face
<b>USE OF INFORMATION &amp; COMMUNICATIONS TECHNOLOGY (ICT)</b> Use of ICT in Teaching, in Laboratory Education, in Communication with students	Use of ICT in Teaching Use of ICT in Laboratory Education Use of ICT in Communication with students

**TEACHING ORGANIZATION**

The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study/creation, project, creation, project. Etc.

The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards

Activity	Workload/semester
Lectures	65
Laboratory Exercise	13
Bibliographic research & analysis	60
Essay	10
<b>Total</b>	<b>148</b>

**STUDENT EVALUATION**

Description of the evaluation process

Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay/Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others

Please indicate all relevant information about the course assessment and how students are informed

**Student evaluation languages**

Greek

**Method (Formative or Concluding)**

Formative

Student evaluation methods	Percent
Written exam with multiple choice test	100

**5 Suggested Bibliography**

Robbins & Cotran Pathologic Basis of Disease (Robbins Pathology)

Rapid Review Pathology by Edward F. Goljan

## COURSE OUTLINE

### 1 GENERAL

<b>SCHOOL</b>	SCHOOL OF HEALTH SCIENCES		
<b>DEPARTMENT</b>	DEPARTMENT OF MEDICINE		
<b>LEVEL OF STUDIES</b>	ISCED level 6 – Bachelor’s or equivalent level		
<b>COURSE CODE</b>		<b>SEMESTER</b>	5
<b>COURSE TITLE</b>	MICROBIOLOGY I		
<b>TEACHING ACTIVITIES</b> If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.		<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>
		6	6.0
<b>COURSE TYPE</b> Background, General Knowledge, Scientific Area, Skill Development	Scientific Area, Skill Development		
<b>PREREQUISITES</b>	No		
<b>TEACHING &amp; EXAMINATION LANGUAGE:</b>	Greek		
<b>COURSE OFFERED TO ERASMUS STUDENTS:</b>			
<b>COURSE URL:</b>			

### 2 LEARNING OUTCOMES

#### Learning Outcomes

Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.

The course provides the conceptual basis for

- understanding pathogenic microorganisms and the mechanisms by which they cause disease in the human body
- demonstrate knowledge of the laboratory diagnosis of microbial diseases and practical skills, including the isolation and characterisation of specific microbes in clinical specimens
- demonstrate knowledge of the epidemiology of infectious diseases
- explain the methods of microorganisms control and prevention, e.g. chemotherapy & vaccines
- understanding antimicrobial chemotherapies and their targets, drug resistance, drug-bacteria relationship, clinical implications, and prevention

#### General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information, ICT Use, Adaptation to new situations, Decision making, Autonomous work, Teamwork, Working in an international environment, Working in an interdisciplinary environment, Production of new research ideas  
 Project design and management Equity and Inclusion, Respect for the natural environment, Sustainability, Demonstration of social, professional and moral responsibility and sensitivity to gender issues, Critical thinking, Promoting free, creative and inductive reasoning

Search, analysis and synthesis of data and information  
 ICT Use  
 Decision making  
 Working in an interdisciplinary environment  
 Equity and Inclusion  
 Demonstration of social, professional and moral responsibility and sensitivity to gender issues  
 Critical thinking  
 Promoting free, creative and inductive reasoning  
 Evaluate clinical cases, order laboratory tests, make differential diagnoses, and negotiate a management plan  
 Communicate effectively in a medical environment  
 Apply scientific principles, methods and knowledge to medical practice and research

### 3 COURSE CONTENT

#### Medical Bacteriology

- Bacterial Morphology and Structure-Metabolism & Growth
- Bacterial Heredity & Variation
- Bacterial Infection & Pathogenesis
- Antimicrobial Chemotherapy, drug resistance and its prevention,
- Laboratory Diagnosis, Control of bacterial diseases

#### Medical Virology

- Viral Classification, Structure & Multiplication
- Viral Heredity & Variation
- Mechanisms of Viral Pathogenesis
- Laboratory Diagnosis of Virus Infection, Control of viral diseases & Antivirus Therapy

#### Medical Immunology

- Immunity
- Cellular Basis of the Immune Response
- Antibodies
- Humoral Immunity
- Cell-Mediated Immunity
- Major Histocompatibility Complex & Transportation
- Complement
- Antigen-Antibody Reactions in the Laboratory
- Hypersensitivity (Allergy)
- Tolerance & Autoimmune Disease
- Immunodeficiency

### 4 LEARNING & TEACHING METHODS - EVALUATION

#### TEACHING METHOD

Face to face, Distance learning, etc.

Face to face

<b>USE OF INFORMATION &amp; COMMUNICATIONS TECHNOLOGY (ICT)</b> Use of ICT in Teaching, in Laboratory Education, in Communication with students	Use of ICT in Teaching Use of ICT in Laboratory Education Use of ICT in Communication with students														
<b>TEACHING ORGANIZATION</b> The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study/creation, project, creation, project. Etc.  The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards	<table border="1"> <thead> <tr> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>78</td> </tr> <tr> <td>Laboratory Exercise</td> <td>14</td> </tr> <tr> <td>Bibliographic research &amp; analysis</td> <td>6</td> </tr> <tr> <td>Essay</td> <td>10</td> </tr> <tr> <td>Study</td> <td>70</td> </tr> <tr> <td><b>Total</b></td> <td><b>178</b></td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	78	Laboratory Exercise	14	Bibliographic research & analysis	6	Essay	10	Study	70	<b>Total</b>	<b>178</b>
Activity	Workload/semester														
Lectures	78														
Laboratory Exercise	14														
Bibliographic research & analysis	6														
Essay	10														
Study	70														
<b>Total</b>	<b>178</b>														

<b>STUDENT EVALUATION</b> Description of the evaluation process  Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay/Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others Please indicate all relevant information about the course assessment and how students are informed	<b>Student evaluation languages</b> Greek  <b>Method (Formative or Concluding)</b> Formative  <table border="1"> <thead> <tr> <th>Student evaluation methods</th> <th>Percent</th> </tr> </thead> <tbody> <tr> <td>Written exam with multiple choice test</td> <td>100</td> </tr> </tbody> </table>	Student evaluation methods	Percent	Written exam with multiple choice test	100
Student evaluation methods	Percent				
Written exam with multiple choice test	100				

### 5 Suggested Bibliography

- Medical Microbiology, Jawetz, Melnick, Adelberg's
- Medical Microbiology, Patrick R. Murray, Ken S. Rosenthal, Michael A. Pfaller
- Introduction to Medical Microbiology, Tortora Gerard, Funke Berdell, Case Christine

#### Scientific journals

- [Nature Reviews Microbiology](#)
- [Nature Microbiology](#)
- [Lancet Microbe](#)
- [Annual Review of Microbiology](#)
- [FEMS Microbiology Reviews](#)
- [Current Opinion in Microbiology](#)
- [PLoS Pathogens](#)
- Clinical Microbiology Reviews
- Journal of Clinical Microbiology

## COURSE OUTLINE

### 1 GENERAL

<b>SCHOOL</b>	SCHOOL OF HEALTH SCIENCES		
<b>DEPARTMENT</b>	DEPARTMENT OF MEDICINE		
<b>LEVEL OF STUDIES</b>	ISCED level 6 – Bachelor’s or equivalent level		
<b>COURSE CODE</b>		<b>SEMESTER</b>	5
<b>COURSE TITLE</b>	PHARMACOLOGY II		
<b>TEACHING ACTIVITIES</b> If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labsetc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.	<b>TEACHING HOURS PER WEEK</b>		<b>ECTS CREDITS</b>
	5.5		5.0
<b>COURSE TYPE</b> Background, General Knowledge, Scientific Area, Skill Development	General Knowledge		
<b>PREREQUISITES</b>	No		
<b>TEACHING &amp; EXAMINATION LANGUAGE:</b>	Greek		
<b>COURSE OFFERED TO ERASMUS STUDENTS:</b>			
<b>COURSE URL:</b>			

### 2 LEARNING OUTCOMES

<p><b>Learning Outcomes</b> Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</p>
<p>Upon successful completion of the course the student will be able to:</p> <ul style="list-style-type: none"> <li>- Know, understand and appropriately use medical terminology related to pharmacology.</li> <li>- Know and understand drug therapies by system.</li> <li>- Know and distinguish the risks of pharmacotherapy (indications, contraindications, therapeutic levels).</li> <li>- Know, understand public health issues - sensible use of antibiotics / vaccinations</li> <li>- Know, understand the basic principles of Therapeutics and Prescribing.</li> </ul>

<p><b>General Skills</b></p> <p>Name the desirable general skills upon successful completion of the module</p> <p>Search, analysis and synthesis of data and information, ICT Use, Adaptation to new situations, Decision making, Autonomous work, Teamwork, Working in an international environment, Working in an interdisciplinary environment, Production of new research ideas</p> <p>Project design and management Equity and Inclusion, Respect for the natural environment, Sustainability, Demonstration of social, professional and moral responsibility and sensitivity to gender issues, Critical thinking, Promoting free, creative</p>
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and inductive reasoning

- Search, analysis and synthesis of data and information, using the necessary technologies
- Decision-making
- Autonomous work
- Working in an international environment
- Working in an interdisciplinary environment
- Promotion of free, creative and deductive thinking
- Adapting to new situations
- Generating new research ideas

### 3 COURSE CONTENT

Pharmacology per System

1. Respiratory
2. Hypothalamus/Pituitary
3. Vaccines
4. Cardiovascular
5. Hypertension
6. Heart Failure
7. Reproductive System
8. Adrenal hormones
9. Metabolic
10. Myoskeletal/ NSAIDs
11. Antibiotics
12. Thyroid
13. Antidiabetic
14. Blood
15. Antiviral/Antimycotic/Antiparasitic
16. Immune system
17. Drug Control
18. Digestive
19. Antiarrhythmics
20. Diuretics
21. Anticancer
22. Anticancer – targeted therapies
23. Biological therapies
24. Gene therapies
25. Personalised Pharmacotherapy 1

**Workshops or tutorials or clinical training**

- 1 Simulated drug administration
- 2 Clinical Pharmacology (theoretical part)
- 3 Clinical Pharmacology (practical part)
- 4 Clinical Pharmacology (presentation of papers)
- 5 ELISA Agonist/Antagonist
- 6 Principles of Prescribing

### 4 LEARNING & TEACHING METHODS - EVALUATION

<b>TEACHING METHOD</b> Face to face, Distance learning, etc.	Face to face
<b>USE OF INFORMATION &amp; COMMUNICATIONS TECHNOLOGY (ICT)</b> Use of ICT in Teaching, in Laboratory Education, in Communication with students	Use of ICT in Teaching Use of ICT in Communication with students

**TEACHING ORGANIZATION**

The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study/creation, project, creation, project. Etc.

The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards

Activity	Workload/semester
Lectures	52
Laboratory Exercise	20
Unguided study	75
<b>Total</b>	<b>147</b>

**STUDENT EVALUATION**

Description of the evaluation process

Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay/Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others

Please indicate all relevant information about the course assessment and how students are informed

**Student evaluation languages**

Greek

**Method (Formative or Concluding)**

Formative

Student evaluation methods	Percent
Written exam with essay answer questions	100

Written examination covering the entire course material. Exams are held at the end of the semester. Laboratory course reports. Prerequisite for participating in the written exams is the successful attendance of the laboratory exercises

**5 Suggested Bibliography**

1. Pharmacology

Edition: 8th/2018

Authors: Humphrey G. Rang, James M. Ritter, Rod Flower, Graeme Henderson

ISBN: 9789605831738

Type: Textbook

Publisher: PARISIANOU SINGLE PUBLISHING AND TRADE COMPANY FOR SCIENTIFIC BOOKS

2. Basic and Clinical Pharmacology 2nd edition

Edition: 2/2021

Authors: Katzung G. Bertram, Trevor J. Anthony

ISBN: 9789925576159

Type: textbook

Publisher: BROKEN HILL PUBLISHERS LTD.

3. Molecular and Clinical Pharmacology

Editorial: 1st ed./2018

Authors: Tsiftoglou Asterios

ISBN: 9789601223940

Type. Publisher. UNIVERSITY STUDIO PRESS

## COURSE OUTLINE

### 1 GENERAL

<b>SCHOOL</b>	SCHOOL OF HEALTH SCIENCES		
<b>DEPARTMENT</b>	DEPARTMENT OF MEDICINE		
<b>LEVEL OF STUDIES</b>	ISCED level 6 – Bachelor’s or equivalent level		
<b>COURSE CODE</b>		<b>SEMESTER</b>	6
<b>COURSE TITLE</b>	PHYSICAL SIGNS IN CLINICAL SURGERY		
<b>TEACHING ACTIVITIES</b> If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labsetc. If the ECTS Credits are awarded to the whole course, then please indicate theteaching hours per week and the corresponding ECTS Credits.		<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>
		8	7.0
<b>COURSE TYPE</b> Background, General Knowledge, Scientific Area, Skill Development	Scientific Area		
<b>PREREQUISITES</b>	No		
<b>TEACHING &amp; EXAMINATION LANGUAGE:</b>	Greek		
<b>COURSE OFFERED TO ERASMUSSTUDENTS:</b>			
<b>COURSE URL:</b>			

### 2 LEARNING OUTCOMES

<p><b>Learning Outcomes</b> Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</p>
<p>Learning objectives for doctor of Medical program - Interpersonal and Communication skills:</p> <ul style="list-style-type: none"> <li>- Engage in effective oral communication</li> <li>- Approach and the necessity of talking decisions by the bed</li> <li>- Recognize symptoms and understand Clinical signs of diseases and syndromes having surgical interest</li> <li>- Complete a throughout the clinical examination</li> <li>- Be familiar with surgical procedures</li> </ul> <p>Acknowledge the meaning of surgical</p>

<p><b>General Skills</b> Name the desirable general skills upon successful completion of the module</p>
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Search, analysis and synthesis of data and information, ICT Use, Adaptation to new situations, Decision making, Autonomous work, Teamwork, Working in an international environment, Working in an interdisciplinary environment, Production of new research ideas  
 Project design and management Equity and Inclusion, Respect for the natural environment, Sustainability, Demonstration of social, professional and moral responsibility and sensitivity to gender issues, Critical thinking, Promoting free, creative and inductive reasoning

Search, analysis and synthesis of data and information, ICT Use  
 Decision making  
 Autonomous work  
 Teamwork  
 Working in an international environment  
 Working in an interdisciplinary environment  
 Equity and Inclusion  
 Demonstration of social, professional and moral responsibility and sensitivity to gender issues

### 3 COURSE CONTENT

Lectures:

- Medical history - family Medical history
  - Clinical examination - methods
  - Clinical symptoms and signs:
  - Head - Face
  - Neck
  - Thorax - Lungs - Heart
  - Circulation
  - Endocrine System
  - Breast
  - Skin - Soft tissue
  - Abdominal wall - Hernias
  - Abdomen - Intrabdominal Surgical Diseases
  - Surgical Diseases
  - Acute abdomen
  - Peritoneum
  - Vessels and Arteries
  - Trauma patient - ABCDE
  - Cancer patient
  - Principles of Asepsis - Antisepsis - Sterilisation
  - MD information records
- Clinical examination by: Anatomy, Physiology, Surgical evaluation, MD and Surgical records

### 4 LEARNING & TEACHING METHODS - EVALUATION

<b>TEACHING METHOD</b> Face to face, Distance learning, etc.	Face to face
<b>USE OF INFORMATION &amp; COMMUNICATIONS TECHNOLOGY (ICT)</b> Use of ICT in Teaching, in Laboratory Education, in Communication with students	Use of ICT in Teaching Use of ICT in Communication with students

**TEACHING ORGANIZATION**

The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study/creation, project, creation, project. Etc.

The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards

Activity	Workload/semester
Lectures	52
Clinical Exercise	52
Laboratory Exercise	26
Writing Project	65
<b>Total</b>	<b>195</b>

**STUDENT EVALUATION**

Description of the evaluation process

Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay/Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others

Please indicate all relevant information about the course assessment and how students are informed

**Student evaluation languages**

Greek

**Method (Formative or Concluding)**

Formative

Student evaluation methods	Percent
Written exam with short answer questions	100

**5 Suggested Bibliography**

First Surgical Department

- Clinical Diagnosis, history, physical examination Book's reference Authors: Swartz Mark

Edition: 6nd /2011 ISBN:9789607875525 Textbook (904 pages)

Publisher: Lagos Dimitrios Publications: Lagos Dimitrios

- Clinical examination of Surgical Patient Book's reference Authors: G. Skalkeas

Edition: 1rd /1991 ISBN: 9603998198 Textbook (672 pages)

Publisher: P.H. Pachalidis

Publications: BROKEN HILL PUBLISHERS LTD

Second Surgical Department

- Browse's Surgical Diseases: interpretation of signs and symptoms Book's reference Authors: J Burnard K.G., Black J., Corbett S.A., Thomas W.E.G.

Edition: 2022

ISBN:9789925588930

Publications: BROKEN HILL PUBLISHERS LTD

- Examination of Surgical Patient

Book's reference

Edition: 1st /1991 ISBN: 9603998198 Textbook (672 pages)

Publisher: P.H. Pascalidis

Publications: BROKEN HILL PUBLISHERS LTD

## COURSE OUTLINE

### 1 GENERAL

<b>SCHOOL</b>	SCHOOL OF HEALTH SCIENCES		
<b>DEPARTMENT</b>	DEPARTMENT OF MEDICINE		
<b>LEVEL OF STUDIES</b>	ISCED level 6 – Bachelor’s or equivalent level		
<b>COURSE CODE</b>		<b>SEMESTER</b>	6
<b>COURSE TITLE</b>	SURGICAL PATHOLOGY		
<b>TEACHING ACTIVITIES</b> If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labsetc. If the ECTS Credits are awarded to the whole course, then please indicate theteaching hours per week and the corresponding ECTS Credits.		<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>
		6	6.0
<b>COURSE TYPE</b> Background, General Knowledge, Scientific Area, Skill Development	Scientific area		
<b>PREREQUISITES</b>	No		
<b>TEACHING &amp; EXAMINATION LANGUAGE:</b>	Greek		
<b>COURSE OFFERED TO ERASMUSSTUDENTS:</b>			
<b>COURSE URL:</b>			

### 2 LEARNING OUTCOMES

<p><b>Learning Outcomes</b> Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</p>
<p>After successful completion of the Surgical Pathology course, medical students will:</p> <ol style="list-style-type: none"> <li>1. Have acquired basic knowledge of the pathogenesis of human diseases</li> <li>2. Have acquired basic knowledge on the use of histochemical, immunohistochemical and molecular approaches for the differential diagnosis of diseases</li> <li>3. Be able to examine macro- and microscopically tissue samples from various human diseases</li> </ol>

<p><b>General Skills</b></p> <p>Name the desirable general skills upon successful completion of the module</p> <p>Search, analysis and synthesis of data and information, ICT Use, Adaptation to new situations, Decision making, Autonomous work, Teamwork, Working in an international environment, Working in an interdisciplinary environment, Production of new research ideas Project design and management Equity and Inclusion, Respect for the natural environment, Sustainability, Demonstration</p>
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of social, professional and moral responsibility and sensitivity to gender issues, Critical thinking, Promoting free, creative and inductive reasoning

Search, analysis and synthesis of data and information  
Decision making  
Autonomous work,  
Teamwork  
Production of new research ideas  
Critical thinking

### 3 COURSE CONTENT

Pathology of human diseases:

1. Diseases of the Heart
2. Vascular diseases
3. Diseases of the oral cavity
4. Diseases of the mandible and maxilla
5. Diseases of the esophagus
6. Gastric diseases
7. Intestinal diseases
8. Diseases of the salivary glands
9. Liver diseases
10. Diseases of the gallbladder and biliary tract
11. Diseases of the pancreas
12. Diseases of the nasal cavity, paranasal sinuses and nasopharynx
13. Diseases of the larynx and trachea
14. Diseases of the lung
15. Diseases of the pleura
16. Diseases of the mediastinum and thymus
17. Kidney diseases
18. Diseases of the urinary tract
19. Diseases of the testicle
20. Disease of the prostate
21. Disease of the penis and scrotum
22. Gynecological diseases
23. Gestation diseases
26. Breast diseases
27. Diseases of the pineal gland and epiphysis
28. Diseases of the thyroid and parathyroid glands
29. Adrenal diseases
30. Diseases of the endocrine pancreas
31. Disease of the lymph nodes, spleen and bone marrow
32. Diseases of the skin and adnexal
33. Diseases of the bone and connective tissue
34. Neurological diseases
35. Diseases of the eye and ear

Laboratory experience

1. Macroscopic observation of surgical specimens
2. Tissue selection for microscopic examination
3. Histochemistry, immunohistochemistry and molecular techniques
4. Microscopic examination of pathological tissues

#### 4 LEARNING & TEACHING METHODS - EVALUATION

<b>TEACHING METHOD</b> Face to face, Distance learning, etc.	Face to face													
<b>USE OF INFORMATION &amp; COMMUNICATIONS TECHNOLOGY (ICT)</b> Use of ICT in Teaching, in Laboratory Education, in Communication with students	Use of ICT in Teaching Use of ICT in Laboratory Education Use of ICT in Communication with students													
<b>TEACHING ORGANIZATION</b> The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study/creation, project, creation, project. Etc.  The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards	<table border="1" data-bbox="810 555 1358 936"> <thead> <tr> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>78</td> </tr> <tr> <td>Laboratory Exercise</td> <td>16</td> </tr> <tr> <td>Bibliographic research &amp; analysis</td> <td>70</td> </tr> <tr> <td>Essay</td> <td>10</td> </tr> <tr> <td><b>Total</b></td> <td><b>174</b></td> </tr> </tbody> </table>		Activity	Workload/semester	Lectures	78	Laboratory Exercise	16	Bibliographic research & analysis	70	Essay	10	<b>Total</b>	<b>174</b>
Activity	Workload/semester													
Lectures	78													
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<b>Total</b>	<b>174</b>													

<b>STUDENT EVALUATION</b> Description of the evaluation process  Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay/Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others  Please indicate all relevant information about the course assessment and how students are informed	<b>Student evaluation languages</b> Greek  <b>Method (Formative or Concluding)</b> Formative  <table border="1" data-bbox="810 1245 1465 1413"> <thead> <tr> <th>Student evaluation methods</th> <th>Percent</th> </tr> </thead> <tbody> <tr> <td>Written exam with multiple choice test</td> <td>100</td> </tr> </tbody> </table>		Student evaluation methods	Percent	Written exam with multiple choice test	100
Student evaluation methods	Percent					
Written exam with multiple choice test	100					

#### 5 Suggested Bibliography

Mills and Sternberg's Diagnostic Surgical Pathology

Robbins & Cotran Pathologic Basis of Disease (Robbins Pathology)

## COURSE OUTLINE

### 1 GENERAL

<b>SCHOOL</b>	SCHOOL OF HEALTH SCIENCES		
<b>DEPARTMENT</b>	DEPARTMENT OF MEDICINE		
<b>LEVEL OF STUDIES</b>	ISCED level 6 – Bachelor’s or equivalent level		
<b>COURSE CODE</b>		<b>SEMESTER</b>	6
<b>COURSE TITLE</b>	PATHOPHYSIOLOGY II		
<b>TEACHING ACTIVITIES</b> If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labsetc. If the ECTS Credits are awarded to the whole course, then please indicate theteaching hours per week and the corresponding ECTS Credits.		<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>
		4	4.0
<b>COURSE TYPE</b> Background, General Knowledge, Scientific Area, Skill Development	Scientific Area		
<b>PREREQUISITES</b>	No		
<b>TEACHING &amp; EXAMINATION LANGUAGE:</b>	Greek		
<b>COURSE OFFERED TO ERASMUSSTUDENTS:</b>			
<b>COURSE URL:</b>			

### 2 LEARNING OUTCOMES

<p><b>Learning Outcomes</b> Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</p>
<p>Learning outcomes include:</p> <ul style="list-style-type: none"> <li>- understanding of common pathogenic mechanisms underlying groups of diseases and syndromes</li> <li>- development of critical reasoning and ability for differential diagnosis based on pathogenic mechanisms underlying diseases</li> <li>- familiarization with formulation of research questions and with research methodology</li> </ul> <p>Skills and abilities acquired after successful course completion:</p> <ul style="list-style-type: none"> <li>- Knowledge of fundamental pathogenic mechanisms relevant to diabetology, endocrinology, cardiology, vascular medicine, pulmonary medicine, oncology and radiation oncology, as well as knowledge of relevant clinical manifestations/syndromes</li> <li>- Understanding basic principles of translational research</li> </ul>

<b>General Skills</b>
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Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information, ICT Use, Adaptation to new situations, Decision making, Autonomous work, Teamwork, Working in an international environment, Working in an interdisciplinary environment, Production of new research ideas  
Project design and management Equity and Inclusion, Respect for the natural environment, Sustainability, Demonstration of social, professional and moral responsibility and sensitivity to gender issues, Critical thinking, Promoting free, creative and inductive reasoning

Search, analysis and synthesis of data and information  
ICT Use  
Adaptation to new situations  
Decision making  
Working in an interdisciplinary environment  
Equity and Inclusion  
Demonstration of social, professional and moral responsibility and sensitivity to gender issues  
Critical thinking  
Promoting free, creative and inductive reasoning  
Examining a patient  
Evaluate clinical cases, order laboratory tests, make differential diagnoses, and negotiate a management plan  
Communicate effectively in a medical environment  
Apply scientific principles, methods and knowledge to medical practice and research

### 3 COURSE CONTENT

Lectures:

1. Pathophysiology of cardiology
2. Pathophysiology of respiratory diseases
3. Pathophysiology of clinical oncology
4. Pathophysiology of radiation oncology
5. Pathophysiology of infections-sepsis
6. Pathophysiology of endocrine diseases
7. Pathophysiology of vascular diseases
8. Pathophysiology of central nervous system diseases
9. Pathophysiology of diabetes mellitus
10. Pathophysiology of metabolic disorders

### 4 LEARNING & TEACHING METHODS - EVALUATION

<b>TEACHING METHOD</b> Face to face, Distance learning, etc.	Face to face
<b>USE OF INFORMATION &amp; COMMUNICATIONS TECHNOLOGY (ICT)</b> Use of ICT in Teaching, in Laboratory Education, in Communication with students	Use of ICT in Teaching Use of ICT in Laboratory Education Use of ICT in Communication with students

**TEACHING ORGANIZATION**

The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study/creation, project, creation, project. Etc.

The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards

Activity	Workload/semester
Lectures	50
Bibliographic research & analysis	10
Essay	40
<b>Total</b>	<b>100</b>

**STUDENT EVALUATION**

Description of the evaluation process

Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay/Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others

Please indicate all relevant information about the course assessment and how students are informed

**Student evaluation languages**

Greek

**Method (Formative or Concluding)**

Concluding

Student evaluation methods	Percent
Essay	100

**5 Suggested Bibliography**

Textbooks:

- 1) Principles of Pathophysiology by CE Kaufman, PA McKee.
- 2) Pathophysiology of diseases by NM Hart, GA Loeffler

Journals:

Nature Medicine, volumes 2016-2023

## COURSE OUTLINE

### 1 GENERAL

<b>SCHOOL</b>	SCHOOL OF HEALTH SCIENCES		
<b>DEPARTMENT</b>	DEPARTMENT OF MEDICINE		
<b>LEVEL OF STUDIES</b>	ISCED level 6 – Bachelor’s or equivalent level		
<b>COURSE CODE</b>		<b>SEMESTER</b>	6
<b>COURSE TITLE</b>	MICROBIOLOGY II		
<b>TEACHING ACTIVITIES</b> If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labsetc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.	<b>TEACHING HOURS PER WEEK</b>		<b>ECTS CREDITS</b>
	6		6.0
<b>COURSE TYPE</b> Background, General Knowledge, Scientific Area, Skill Development	Scientific Area, Skill Development		
<b>PREREQUISITES</b>	No		
<b>TEACHING &amp; EXAMINATION LANGUAGE:</b>	Greek		
<b>COURSE OFFERED TO ERASMUS STUDENTS:</b>			
<b>COURSE URL:</b>			

### 2 LEARNING OUTCOMES

<p><b>Learning Outcomes</b> Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</p>
<p>The course provides the conceptual basis for</p> <ul style="list-style-type: none"> <li>• understanding pathogenic microorganisms and the mechanisms by which they cause disease in the human body</li> <li>• demonstrate knowledge of the laboratory diagnosis of microbial diseases and practical skills, including the isolation and characterization of specific microbes in clinical specimens</li> <li>• demonstrate knowledge of the epidemiology of infectious diseases</li> <li>• explain the methods of microorganisms control and prevention, e.g. chemotherapy &amp; vaccines</li> <li>• understanding antimicrobial chemotherapies and their targets, drug resistance, drug-bacteria relationship, clinical implications, and prevention</li> </ul>

<p><b>General Skills</b></p> <p>Name the desirable general skills upon successful completion of the module</p> <p>Search, analysis and synthesis of data and information, ICT Use, Adaptation to new situations, Decision making, Autonomous work, Teamwork, Working in an international environment, Working in an interdisciplinary environment,</p>
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Production of new research ideas Project design and management Equity and Inclusion, Respect for the natural environment, Sustainability, Demonstration of social, professional and moral responsibility and sensitivity to gender issues, Critical thinking, Promoting free, creative and inductive reasoning
Search, analysis and synthesis of data and information ICT Use Decision making Working in an interdisciplinary environment Equity and Inclusion Demonstration of social, professional and moral responsibility and sensitivity to gender issues Critical thinking Promoting free, creative and inductive reasoning Evaluate clinical cases, order laboratory tests, make differential diagnoses, and negotiate a management plan Communicate effectively in a medical environment Apply scientific principles, methods and knowledge to medical practice and research

### 3 COURSE CONTENT

<p><b>BACTERIOLOGY</b>          Specific bacterial pathogens and the diseases they cause (Morphology, culture, biological characteristics, virulence factors and their effects, diagnostic laboratory tests, and the principles of controlling infections). Staphylococcus. Streptococcus. Neisseria. Enterobacteriaceae (Escherichia, Klebsiella, Enterobacter, Proteus, Salmonella, and Shigella). Campylobacter and Helicobacter. Vibrio cholera. Clostridia (sporeforming anaerobic bacteria). Pseudomonas. Mycobacteria. Brucella. Hemophilus species. Treponema. Leptospira. Legionella. Chlamydia. Mycoplasmas</p> <p><b>VIROLOGY</b>          Specific virus families. (Main structural and biological characteristics, transmission cycle, pathogenesis and clinical profiles, diagnostic laboratory tests, prevention and control). Orthomyxoviridae, Paramyxoviridae, Picornaviridae, Herpesviridae, Papillomaviridae, Polyomaviridae, Retroviridae, Adenoviridae. Hepadnaviridae, Hepatitis C Virus and other Flaviviridae, Hepatitis D (Delta) virus, Togavirus, Reovirus, and Rotavirus.</p> <p><b>PROTOZOOLOGY</b>          Major medically important parasitic protozoa and associated diseases. Giardia intestinalis, Trichomonas vaginalis, Trypanosomes, Leishmania, Entamoeba histolytica, Plasmodium malariae, Toxoplasma gondii, Pneumocystis carinii.</p> <p><b>MYCOLOGY</b>          Major medically important fungi and associated diseases. Basic biology of fungi. Yeast-like fungi, filamentous fungi (mold) and dimorphic fungi. Spectrum of superficial, cutaneous and deep mycoses.</p>
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### 4 LEARNING & TEACHING METHODS - EVALUATION

<b>TEACHING METHOD</b> Face to face, Distance learning, etc.	Face to face
<b>USE OF INFORMATION &amp; COMMUNICATIONS TECHNOLOGY (ICT)</b> Use of ICT in Teaching, in Laboratory Education, in Communication with students	Use of ICT in Teaching Use of ICT in Laboratory Education Use of ICT in Communication with students

### TEACHING ORGANIZATION

The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study/creation, project, creation, project. Etc.

The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards

Activity	Workload/semester
Lectures	78
Laboratory Exercise	14
Bibliographic research & analysis	6
Essay	10
Study	70
<b>Total</b>	<b>178</b>

### STUDENT EVALUATION

Description of the evaluation process

Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay/Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others

Please indicate all relevant information about the course assessment and how students are informed

#### Student evaluation languages

Greek

#### Method (Formative or Concluding)

Formative

Student evaluation methods	Percent
Written exam with multiple choice test	100

## 5 Suggested Bibliography

- Medical Microbiology, Jawetz, Melnick, Adelberg's
- Medical Microbiology, Patrick R. Murray, Ken S. Rosenthal, Michael A. Pfaller
- Introduction to Medical Microbiology, Tortora Gerard, Funke Berdell, Case Christine

#### Scientific journals

- Nature Reviews Microbiology
- Nature Microbiology
- Lancet Microbe
- Annual Review of Microbiology
- FEMS Microbiology Reviews
- Current Opinion in Microbiology
- PLoS Pathogens
- Clinical Microbiology Reviews
- Journal of Clinical Microbiology

## COURSE OUTLINE

### 1 GENERAL

<b>SCHOOL</b>	SCHOOL OF HEALTH SCIENCES		
<b>DEPARTMENT</b>	DEPARTMENT OF MEDICINE		
<b>LEVEL OF STUDIES</b>	ISCED level 6 – Bachelor’s or equivalent level		
<b>COURSE CODE</b>		<b>SEMESTER</b>	6
<b>COURSE TITLE</b>	DERMATOLOGY		
<b>TEACHING ACTIVITIES</b> If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labsetc. If the ECTS Credits are awarded to the whole course, then please indicate theteaching hours per week and the corresponding ECTS Credits.	<b>TEACHING HOURS PER WEEK</b>		<b>ECTS CREDITS</b>
	4		3.0
<b>COURSE TYPE</b> Background, General Knowledge, Scientific Area, Skill Development	Scientific Area		
<b>PREREQUISITES</b>	No		
<b>TEACHING &amp; EXAMINATION LANGUAGE:</b>	Greek		
<b>COURSE OFFERED TO ERASMUSSTUDENTS:</b>			
<b>COURSE URL:</b>			

### 2 LEARNING OUTCOMES

<p><b>Learning Outcomes</b> Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</p>
<p>Upon successful completion of the course, the student will be able:</p> <ul style="list-style-type: none"> <li>- To clinically identify the elementary clinical changes of the skin.</li> <li>- To clinically examine the dermatological patient, approach him diagnostically with a clinical examination and ordered laboratory tests and gradually achieve the nosological determination of each case.</li> <li>- To achieve the differential diagnosis between the various nosological entities of Dermatology and Venereology.</li> <li>- To recognize the corresponding skin manifestations in the context of systemic diseases.</li> <li>- To recognize the complications of major dermatological diseases.</li> <li>- To know the therapeutic treatment of dermatological pathological entities and individual skin manifestations of systemic diseases.</li> </ul>

<p><b>General Skills</b></p> <p>Name the desirable general skills upon successful completion of the module</p> <p>Search, analysis and synthesis of data and information, ICT Use, Adaptation to new situations, Decision making, Autonomous work, Teamwork, Working in an international environment, Working in an interdisciplinary environment,</p>
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Production of new research ideas

Project design and management Equity and Inclusion, Respect for the natural environment, Sustainability, Demonstration of social, professional and moral responsibility and sensitivity to gender issues, Critical thinking, Promoting free, creative and inductive reasoning

Adaptation to new situations

Decision making

Working in an interdisciplinary environment

Equity and Inclusion

Demonstration of social, professional and moral responsibility and sensitivity to gender issues

Critical thinking

Promoting free, creative and inductive reasoning

Examining a patient

Evaluate clinical cases, order laboratory tests, make differential diagnoses, and negotiate a management plan

Communicate effectively in a medical environment

Apply scientific principles, methods and knowledge to medical practice and research

### 3 COURSE CONTENT

#### Theoretical:

- Dermatology Terminology. Skin histology. Embryology of the skin. Functional mission of the individual structural elements of the skin. Skin chemistry. Elementary clinical lesions of the skin. Elementary histological lesions of the skin. Physiological functions of the skin. Features of superficial mucous membranes. Circle of hair.
- Clinical examination of the skin. Specialized laboratory tests ordered for dermatological patients.
- Bacterial skin diseases: Existing skin flora and defense mechanisms against infections. Staphylococcal skin infections (furunculosis barbae). Streptococcal skin infections (keratosis, erysipelas, cellulitis, impetigo contagiosum gangrene gas, necrotizing fasciitis, therapeutical management). Pseudo-anthrax, Anthrax.
- Viral skin diseases: (Herpes simplex, Zoster, warts, genital warts, molluscum contagiosum).
- Scabies. Wear and tear.
- Fungal infections: Physiological characteristics of fungi. Classification of fungal infections. Laboratory diagnostics of fungal infections. Superficial fungal infections. Deep fungal infections. Opportunistic fungal infections.
- Tuberculosis of the skin. Leishmaniasis, Hansen's disease.
- Psoriasis. Inverse Psoriasis. Nail psoriasis. Palmoplantar psoriasis. Scalp psoriasis. Psoriasis in children. Guttate psoriasis. Psoriatic arthritis. Erythrodermic psoriasis. Generalized pustular psoriasis.
- Dermatitis. Irritant contact dermatitis. Allergic contact dermatitis. Atopic dermatitis. Sd Kaposi-Juliusberg. Seborrheic Dermatitis.
- Hives. Classification of urticaria. Acute urticaria. Chronic urticaria. Angioedema, Photodermatoses.
- Erythema nodosum. Erythema multiforme. Sd Stevens-Johnson. Sd Lyell (d.d. from staphylococcal Sd scalded skin).
- Acne. Alopecia. Non-scarring alopecia. Alopecia areata, Scarring alopecia.
- Rosacea. Pityriasis rosea Gibert.
- Lupus erythematosus. Dermatomyositis. Scleroderma. Sjogren's sd.
- Perforating Dermatoses. Inverse follicular keratosis. Nevus Achromicus. Vitiligo.
- Benign skin tumours. Seborrheic hyperkeratosis. Histiocytofibroma. Keratoacanthoma. Cylindroma.
- Precancerous conditions of the skin. Actinic Keratosis. Bowen's disease. Paget's disease.
- Basal cell carcinoma of the skin. Squamous cell carcinoma of the skin.
- Hemangiomas. Lymphangiomas.
- Hyperpigmented nevocellular nevi, Spitz nevus. Giant nevocellular nevus Malignant melanoma. Amelanotic Melanoma.
- Kaposi's sarcoma. Mediterranean Kaposi's sarcoma. African Kaposi's sarcoma. Kaposi's sarcoma and AIDS.
- Lymphomas. Cutaneous lymphomas. Histiocytoses.
- Lichen planus. Pityriasis rubra pilaris. Prurigo papulovesicular parasitic. Drug Eruptions. Occupational skin diseases. Suppurative Hidrosadenitis.
- Autoimmune bullous diseases. Pemphigus Classification of pemphigus. Traditional pemphigoid. Cicatricial Pemphigoid. Pemphigoid gestationis. Epidermolysis bullosa acquisita. IgA linear dermatosis. Duhring- Brocq dermatitis herpetiformis and celiac disease.
- Sexually transmitted diseases. Syphilis. Gonococcal urethritis. Chancroid (Ulcus Molle). Lymphogranuloma venereum. Granuloma Inguinale.

- Cutaneous manifestations of Human Immunodeficiency Virus.
- Dermatological disorders in Diabetes Mellitus.
- Dermatology of childhood (daily problems, emergencies)
- Leg ulcers.

Clinical exercise:

History taking, physical examination, monitoring of the diagnostic process and treatment at the Outpatient Clinic, monitoring of the visits of hospitalized patients.

#### 4 LEARNING & TEACHING METHODS - EVALUATION

<b>TEACHING METHOD</b> Face to face, Distance learning, etc.	Face to face										
<b>USE OF INFORMATION &amp; COMMUNICATIONS TECHNOLOGY (ICT)</b> Use of ICT in Teaching, in Laboratory Education, in Communication with students	Use of ICT in Communication with students										
<b>TEACHING ORGANIZATION</b> The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study/creation, project, creation, project. Etc.  The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards	<table border="1"> <thead> <tr> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>52</td> </tr> <tr> <td>Clinical Exercise</td> <td>8</td> </tr> <tr> <td>Bibliographic research &amp; analysis</td> <td>20</td> </tr> <tr> <td><b>Total</b></td> <td><b>80</b></td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	52	Clinical Exercise	8	Bibliographic research & analysis	20	<b>Total</b>	<b>80</b>
Activity	Workload/semester										
Lectures	52										
Clinical Exercise	8										
Bibliographic research & analysis	20										
<b>Total</b>	<b>80</b>										

<b>STUDENT EVALUATION</b> Description of the evaluation process  Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay/Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others  Please indicate all relevant information about the course assessment and how students are informed	<b>Student evaluation languages</b> Greek  <b>Method (Formative or Concluding)</b> Concluding  <table border="1"> <thead> <tr> <th>Student evaluation methods</th> <th>Percent</th> </tr> </thead> <tbody> <tr> <td>Written exam with Essay Development Questions</td> <td>100</td> </tr> </tbody> </table>	Student evaluation methods	Percent	Written exam with Essay Development Questions	100
Student evaluation methods	Percent				
Written exam with Essay Development Questions	100				

#### 5 Suggested Bibliography

1. Braun-Falco's Dermatology. Publisher: Springer 2022.
2. Rook's Dermatology, 4 Volume Set. 9th edition. 2016. Publisher: Wiley-Blackwell.
3. Sardana Kabir, Agarwal Pooja. "Textbook of Dermatology and Sexually Transmitted Diseases with HIV infections". 2nd edition. CBS Publishers & Distributors. 2022.
4. Saurat Jean-Hilaire, Lachapelle Jean -Marie, Lipsker Dan, Thomas Luc. "Dermatologie et infections sexuellement transmissibles". 5e edition. Publisher: Elsevier Masson. 2008.
5. Fitzpatrick's Dermatology, Ninth Edition, 2-Volume Set (EBO OK): Edition 9. Publisher: McGraw Hill Professional.
6. Chowdhury M.M.U., Griffiths T.W., Finlay A.Y.: Dermatology training. The essentials. Publisher: Wiley-Blackwell, 2022, February.

## COURSE OUTLINE

### 1 GENERAL

<b>SCHOOL</b>	SCHOOL OF HEALTH SCIENCES		
<b>DEPARTMENT</b>	DEPARTMENT OF MEDICINE		
<b>LEVEL OF STUDIES</b>	ISCED level 6 – Bachelor’s or equivalent level		
<b>COURSE CODE</b>		<b>SEMESTER</b>	7
<b>COURSE TITLE</b>	SURGICAL DIAGNOSIS AND TREATMENT		
<b>TEACHING ACTIVITIES</b> If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labsetc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.		<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>
		6	6.0
<b>COURSE TYPE</b> Background, General Knowledge, Scientific Area, Skill Development	Background		
<b>PREREQUISITES</b>	No		
<b>TEACHING &amp; EXAMINATION LANGUAGE:</b>	Greek		
<b>COURSE OFFERED TO ERASMUS STUDENTS:</b>			
<b>COURSE URL:</b>			

### 2 LEARNING OUTCOMES

<p><b>Learning Outcomes</b> Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</p> <p>Integrate Medical knowledge (MK) to address mechanisms of surgical diseases and trauma. Understand and correlate in Surgical Treatment Biomedical, Clinical, Epidemiological and Social behavioral Sciences.            Complete a surgical clinical assessment Recognize surgical diseases and syndromes Evaluate surgical emergencies            Be able to evaluate organ's dysfunction post-op and potential distress pre-op            Be able to understand surgical pathophysiology and metabolism            Be familiar with trauma and the principles of trauma care            Be able to understand pre-op and post-op care            Be able to repeat basic procedures of minimal invasive care            Be able to communicate and work under emergency situations            Be able to recognize urgent surgical conditions and procedure            Be familiar with principles in theaters and ER and ICU            Be able to interpreting data and study evidence-based scientific work</p>
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## General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information, ICT Use, Adaptation to new situations, Decision making, Autonomous work, Teamwork, Working in an international environment, Working in an interdisciplinary environment, Production of new research ideas  
Project design and management Equity and Inclusion, Respect for the natural environment, Sustainability, Demonstration of social, professional and moral responsibility and sensitivity to gender issues, Critical thinking, Promoting free, creative and inductive reasoning

Search, analysis and synthesis of data and information  
ICT Use  
Decision making  
Autonomous work  
Teamwork  
Working in an international environment  
Working in an international environment  
Equity and Inclusion  
Demonstration of social, professional and moral responsibility and sensitivity to gender issues

## 3 COURSE CONTENT

Surgical Assessment and Management:

- Medical problems in the surgical patient
- Nutrition - Malnutrition
- Wound healing
- Endocrine diseases
- Breast
- Oesophagus
- Stomach - Duodenum
- Small intestine
- Colon and rectum 10 Anus
- Appendix
- Peritoneum - Intraperitoneal infections - Retro peritoneum - Omentium - Mesentery
- Biliary tract
- Portal Hypertension
- Pancreas
- Liver
- Spleen
- Acute Abdomen
- Abdominal wall - Hernias
- Soft tissue - Skin tumors
- Surgical inflections
- Critically -ill patient
- Trauma patients - Pathology
- Burn injuries
- Clinical studies – Interpretation

#### 4 LEARNING & TEACHING METHODS - EVALUATION

<b>TEACHING METHOD</b> Face to face, Distance learning, etc.	Face to face												
<b>USE OF INFORMATION &amp; COMMUNICATIONS TECHNOLOGY (ICT)</b> Use of ICT in Teaching, in Laboratory Education, in Communication with students	Use of ICT in Teaching Use of ICT in Communication with students												
<b>TEACHING ORGANIZATION</b> The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study/creation, project, creation, project. Etc.  The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards	<table border="1" data-bbox="831 506 1378 824"> <thead> <tr> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>52</td> </tr> <tr> <td>Laboratory Exercise</td> <td>26</td> </tr> <tr> <td>Clinical Exercise</td> <td>26</td> </tr> <tr> <td>Writing Project</td> <td>65</td> </tr> <tr> <td><b>Total</b></td> <td><b>169</b></td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	52	Laboratory Exercise	26	Clinical Exercise	26	Writing Project	65	<b>Total</b>	<b>169</b>
Activity	Workload/semester												
Lectures	52												
Laboratory Exercise	26												
Clinical Exercise	26												
Writing Project	65												
<b>Total</b>	<b>169</b>												

<b>STUDENT EVALUATION</b> Description of the evaluation process  Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay/Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others  Please indicate all relevant information about the course assessment and how students are informed	<b>Student evaluation languages</b> Greek  <b>Method (Formative or Concluding)</b> Formative  <table border="1" data-bbox="807 1128 1465 1469"> <thead> <tr> <th>Student evaluation methods</th> <th>Percent</th> </tr> </thead> <tbody> <tr> <td>Written exam with multiple choice test</td> <td>33</td> </tr> <tr> <td>Written exam with short answer questions</td> <td>33</td> </tr> <tr> <td>Clinical examination of a patient</td> <td>34</td> </tr> </tbody> </table>	Student evaluation methods	Percent	Written exam with multiple choice test	33	Written exam with short answer questions	33	Clinical examination of a patient	34
Student evaluation methods	Percent								
Written exam with multiple choice test	33								
Written exam with short answer questions	33								
Clinical examination of a patient	34								

#### 5 Suggested Bibliography

1. Surgery  
 Authors: J Quick, Reed, Harper, Saeb-Parsy Edition: 5th /2018 ISBN:9786185296063 Textbook (864 pages)  
 Publisher: D. Lagos Publications: Dimitrios Lagos
2. Current - Up to date Surgical Assessment  
 Authors: Doherty Gerard  
 Edition: 3rd /2017 ISBN:9789963274499 Textbook (992 pages)  
 Publisher: BROKEN HILL PUBLISHERS LTD  
 Publications: BROKEN HILL PUBLISHERS LTD
3. Oxford - Principles in Surgery  
 Edition: 1st /2022  
 Authors: Thomas W., Reed M., Wyatt M.  
 ISBN:9789925350025  
 Publications: BROKEN HILL PUBLISHERS LTD

## COURSE OUTLINE

### 1 GENERAL

<b>SCHOOL</b>	SCHOOL OF HEALTH SCIENCES		
<b>DEPARTMENT</b>	DEPARTMENT OF MEDICINE		
<b>LEVEL OF STUDIES</b>	ISCED level 6 – Bachelor’s or equivalent level		
<b>COURSE CODE</b>		<b>SEMESTER</b>	7
<b>COURSE TITLE</b>	NEUROLOGY		
<b>TEACHING ACTIVITIES</b> If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labsetc. If the ECTS Credits are awarded to the whole course, then please indicate theteaching hours per week and the corresponding ECTS Credits.		<b>TEACHING HOURS PERWEEK</b>	<b>ECTS CREDITS</b>
		6	6.0
<b>COURSE TYPE</b> Background, General Knowledge, Scientific Area, Skill Development	Scientific Area		
<b>PREREQUISITES</b>	No		
<b>TEACHING &amp; EXAMINATION LANGUAGE:</b>	Greek		
<b>COURSE OFFERED TO ERASMUSSTUDENTS:</b>			
<b>COURSE URL:</b>			

### 2 LEARNING OUTCOMES

<p><b>Learning Outcomes</b> Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</p> <ul style="list-style-type: none"> <li>-The ability to recognize symptoms that may indicate a neurological condition.</li> <li>-The ability to distinguish normal from abnormal findings on a neurological examination.</li> <li>-The ability to localize the lesion in the nervous system when an abnormal process is causing the patient's symptoms and signs.</li> <li>-Knowledge of the pathophysiology and symptomatology of neurological conditions.</li> <li>-Familiarization with of the use and interpretation of common laboratory methods used in the diagnosis of neurological diseases</li> <li>- Familiarization with of the principles underlying a systematic approach to the management of common neurological conditions.</li> </ul>
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<b>General Skills</b>
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Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information, ICT Use, Adaptation to new situations, Decision making, Autonomous work, Teamwork, Working in an international environment, Working in an interdisciplinary environment, Production of new research ideas  
Project design and management Equity and Inclusion, Respect for the natural environment, Sustainability, Demonstration of social, professional and moral responsibility and sensitivity to gender issues, Critical thinking, Promoting free, creative and inductive reasoning

Search, analysis and synthesis of data and information, ICT Use  
Adaptation to new situations  
Decision making  
Autonomous work  
Teamwork  
Working in an international environment  
Working in an interdisciplinary environment  
Production of new research ideas  
Equity and Inclusion  
Demonstration of social, professional and moral responsibility and sensitivity to gender issues  
Critical thinking  
Promoting free, creative and inductive reasoning  
Examining a patient  
Evaluate clinical cases, order laboratory tests, make differential diagnoses, and negotiate a management plan  
Communicate effectively in a medical environment  
Apply scientific principles, methods and knowledge to medical practice and research

### 3 COURSE CONTENT

Theoretical:

1. Clinical Neuroanatomy and Localization.
2. Neurological Diseases
  - Vascular brain diseases (vascular strokes, vascular brain diseases).
  - Demyelinating diseases.
  - Movement disorders.
  - Neurological Intensive Care.
  - Behavioral neurology.
  - Epilepsy.
  - Neuromuscular and Spinal Cord Diseases.
  - Cranial nerve disorders.
  - Headache and pain.
  - Neuro-oncology and Paraneoplastic diseases.
  - Neurological manifestations of systemic diseases.
  - Sleep disorders.
  - Emergencies in Neurology.
3. Basic elements of laboratory neurology  
(Clinical Neurophysiology, Neuroimaging, Neurochemistry, Neuroradiology, etc.)

Clinical Practice:

- Methodology and examination of clinical examination
- cognitive assessment
  - cranial nerves
  - motor and sensory function and reflexes

#### 4 LEARNING & TEACHING METHODS - EVALUATION

<b>TEACHING METHOD</b> Face to face, Distance learning, etc.	Face to face								
<b>USE OF INFORMATION &amp; COMMUNICATIONS TECHNOLOGY (ICT)</b> Use of ICT in Teaching, in Laboratory Education, in Communication with students	Use of ICT in Teaching Use of ICT in Laboratory Education Use of ICT in Communication with students								
<b>TEACHING ORGANIZATION</b> The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study/creation, project, creation, project. Etc.  The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards	<table border="1"> <thead> <tr> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>154</td> </tr> <tr> <td>Clinical Exercise</td> <td>26</td> </tr> <tr> <td><b>Total</b></td> <td><b>180</b></td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	154	Clinical Exercise	26	<b>Total</b>	<b>180</b>
Activity	Workload/semester								
Lectures	154								
Clinical Exercise	26								
<b>Total</b>	<b>180</b>								

<b>STUDENT EVALUATION</b> Description of the evaluation process  Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay/Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others  Please indicate all relevant information about the course assessment and how students are informed	<b>Student evaluation languages</b> Greek  <b>Method (Formative or Concluding)</b> Formative  <table border="1"> <thead> <tr> <th>Student evaluation methods</th> <th>Percent</th> </tr> </thead> <tbody> <tr> <td>Written exam with multiple choice test</td> <td>80</td> </tr> <tr> <td>Oral exam</td> <td>10</td> </tr> <tr> <td>Patient clinical examination</td> <td>10</td> </tr> </tbody> </table>	Student evaluation methods	Percent	Written exam with multiple choice test	80	Oral exam	10	Patient clinical examination	10
Student evaluation methods	Percent								
Written exam with multiple choice test	80								
Oral exam	10								
Patient clinical examination	10								

#### 5 Suggested Bibliography

Clinical Neurology and Neuroanatomy: A Localization-Based Approach, Second Edition 2nd Edition, by Aaron Berkowitz

Adams and Victor's Principles of Neurology 11th Edition, by Allan Ropper, Martin Samuels, Joshua P. Klein, Sashank Prasad

## COURSE OUTLINE

### 1 GENERAL

<b>SCHOOL</b>	SCHOOL OF HEALTH SCIENCES		
<b>DEPARTMENT</b>	DEPARTMENT OF MEDICINE		
<b>LEVEL OF STUDIES</b>	ISCED level 6 – Bachelor’s or equivalent level		
<b>COURSE CODE</b>		<b>SEMESTER</b>	7
<b>COURSE TITLE</b>	RADIOLOGY I		
<b>TEACHING ACTIVITIES</b> If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labsetc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.	<b>TEACHING HOURS PER WEEK</b>		<b>ECTS CREDITS</b>
	7,8		7.0
<b>COURSE TYPE</b> Background, General Knowledge, Scientific Area, Skill Development	Scientific Area		
<b>PREREQUISITES</b>	No		
<b>TEACHING &amp; EXAMINATION LANGUAGE:</b>	Greek		
<b>COURSE OFFERED TO ERASMUS STUDENTS:</b>			
<b>COURSE URL:</b>			

### 2 LEARNING OUTCOMES

<p><b>Learning Outcomes</b> Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</p> <p>Upon successful completion of the module the student will be able to:</p> <ul style="list-style-type: none"> <li>- Distinguishes normal from pathological imaging findings.</li> <li>- Diagnoses with imaging, clinical and laboratory criteria basic diseases in the aforementioned systems.</li> <li>- Knows the hierarchy of use of imaging investigations in cases of acute clinical conditions.</li> <li>- Be aware of the indications, contraindications, efficacy and possible complications of the application of imaging-guided minimally invasive percutaneous methods and indicate their use in diseases of the aforementioned systems, where appropriate.</li> </ul>
<p><b>General Skills</b></p> <p>Name the desirable general skills upon successful completion of the module</p>

Search, analysis and synthesis of data and information, ICT Use, Adaptation to new situations, Decision making, Autonomous work, Teamwork, Working in an international environment, Working in an interdisciplinary environment, Production of new research ideas  
Project design and management Equity and Inclusion, Respect for the natural environment, Sustainability, Demonstration of social, professional and moral responsibility and sensitivity to gender issues, Critical thinking, Promoting free, creative and inductive reasoning

Search, analysis and synthesis of data and information  
Adaptation to new situations  
Decision making  
Working in an interdisciplinary environment  
Equity and Inclusion  
Demonstration of social, professional and moral responsibility and sensitivity to gender issues  
Critical thinking  
Promoting free, creative and inductive reasoning  
Examining a patient  
Evaluate clinical cases, order laboratory tests, make differential diagnoses, and negotiate a management plan  
Communicate effectively in a medical environment  
Apply scientific principles, methods and knowledge to medical practice and research

### 3 COURSE CONTENT

#### A. Theoretical:

- General principles of basic imaging methods.
- Normal chest and lungs – Thoracic HV – Chest A/A assessment steps.
- Semiotics on chest X-ray.
- Mediastinal imaging investigation.
- The chest girth in children.
- Eumonic infections.
- Pleural diseases.
- Chest trauma.
- Diseases of interstitial lung tissue.
- Airway diseases.
- Cancer and metastatic lung - chest disease.
- Vascular diseases.
- Interventional Chest Radiology.
- Imaging anatomy ("radioanatomy") of the Musculoskeletal System, principles and applications of imaging methods in the Musculoskeletal System.
- Musculoskeletal system trauma.
- Spinal Cord Injuries.
- Degenerative diseases of the SS.
- Bone infections, osteonecrosis.
- Arthritis.
- Tumors and tumor-like bone lesions.
- Soft tissue tumors.
- Diseases of the Musculoskeletal System in children.
- Interventional radiology on the musculoskeletal system.
- Gastrointestinal Radioanatomy [HAGS] - Imaging methods in the General Staff –
- Diseases of the esophagus - stomach - 12 finger.
- Diseases of the small intestine.
- Colon diseases.
- Interventional Radiology in GIS diseases.
- GIS and respiratory diseases in children - Imaging-guided interventional medical procedures.

#### B. Clinical tutorials:

Demonstrations and analyses of imaging tests in the field of knowledge and as a continuation of each theoretical module,

differential diagnostic approach, fully justified final diagnosis.

**C. Clinical practice:**

Participation of small groups of students in morning clinical meetings and afternoon clinical exercises.

**4 LEARNING & TEACHING METHODS - EVALUATION**

<b>TEACHING METHOD</b> Face to face, Distance learning, etc.	Face to face												
<b>USE OF INFORMATION &amp; COMMUNICATIONS TECHNOLOGY (ICT)</b> Use of ICT in Teaching, in Laboratory Education, in Communication with students	Use of ICT in Teaching Use of ICT in Laboratory Education Use of ICT in Communication with students												
<b>TEACHING ORGANIZATION</b> The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study/creation, project, creation, project. Etc.  The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards	<table border="1"> <thead> <tr> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>54</td> </tr> <tr> <td>Laboratory Exercise</td> <td>11</td> </tr> <tr> <td>Clinical Exercise</td> <td>36</td> </tr> <tr> <td>Bibliographic research &amp; analysis</td> <td>75</td> </tr> <tr> <td><b>Total</b></td> <td><b>176</b></td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	54	Laboratory Exercise	11	Clinical Exercise	36	Bibliographic research & analysis	75	<b>Total</b>	<b>176</b>
Activity	Workload/semester												
Lectures	54												
Laboratory Exercise	11												
Clinical Exercise	36												
Bibliographic research & analysis	75												
<b>Total</b>	<b>176</b>												

<b>STUDENT EVALUATION</b> Description of the evaluation process  Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay/Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others  Please indicate all relevant information about the course assessment and how students are informed	<p><b>Student evaluation languages</b> Greek</p> <p><b>Method (Formative or Concluding)</b> Formative</p> <table border="1"> <thead> <tr> <th>Student evaluation methods</th> <th>Percent</th> </tr> </thead> <tbody> <tr> <td>Written exam with multiple choice test</td> <td>100</td> </tr> </tbody> </table>	Student evaluation methods	Percent	Written exam with multiple choice test	100
Student evaluation methods	Percent				
Written exam with multiple choice test	100				

**5 Suggested Bibliography**

1. ARGYROPOULOU, GOULIAMOS, DREVELEGAS, KARANTANAS, KELEKIS, PRASOPOULOS, SIABLIS, TSIAMPOULAS, FEZOULIDIS, CLINICAL RADIOLOGY, KONSTANTARAS MEDICAL PUBLICATIONS.
2. LASSERRE ANKE, BLOHM LUDWIG, HANDBOOK OF RADIOLOGY, PARISIAN ANONYMOUS PUBLISHING IMPORT TRADING COMPANY
- P. FLECKENSTEIN, J. TRANUM-JENSEN, ANATOMY OF DIAGNOSTIC IMAGING 3RD EDITION

## COURSE OUTLINE

### 1 GENERAL

<b>SCHOOL</b>	SCHOOL OF HEALTH SCIENCES		
<b>DEPARTMENT</b>	DEPARTMENT OF MEDICINE		
<b>LEVEL OF STUDIES</b>	ISCED level 6 – Bachelor’s or equivalent level		
<b>COURSE CODE</b>		<b>SEMESTER</b>	7
<b>COURSE TITLE</b>	OTORHINOLARYNGOLOGY		
<b>TEACHING ACTIVITIES</b> If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labsetc. If the ECTS Credits are awarded to the whole course, then please indicate theteaching hours per week and the corresponding ECTS Credits.		<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>
		3,6	3.0
<b>COURSE TYPE</b> Background, General Knowledge, Scientific Area, Skill Development	Scientific Area		
<b>PREREQUISITES</b>	No		
<b>TEACHING &amp; EXAMINATION LANGUAGE:</b>	Greek		
<b>COURSE OFFERED TO ERASMUSSTUDENTS:</b>			
<b>COURSE URL:</b>			

### 2 LEARNING OUTCOMES

<p><b>Learning Outcomes</b> Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</p>
<p>Upon successful completion of the course, the student will be able to:</p> <ul style="list-style-type: none"> <li>• Diagnose clinically and laboratory the basic otorhinolaryngological, as well as head and neck diseases.</li> <li>• Diagnose clinically and laboratory allergic rhinitis.</li> <li>• Diagnose clinically and laboratory sleep apnea.</li> <li>• Know the therapeutic protocols of the diseases of the scientific area of Otorhinolaryngology, head and neck surgery.</li> <li>• Know the basic surgical techniques for the diseases of the scientific area of Otorhinolaryngology, head and neck surgery.</li> </ul>
<p><b>General Skills</b></p> <p>Name the desirable general skills upon successful completion of the module</p> <p>Search, analysis and synthesis of data and information, ICT Use, Adaptation to new situations, Decision making, Autonomous work, Teamwork, Working in an international environment, Working in an interdisciplinary environment, Production of new research ideas</p> <p>Project design and management Equity and Inclusion, Respect for the natural environment, Sustainability, Demonstration of social, professional and moral responsibility and sensitivity to gender issues, Critical thinking, Promoting free, creative</p>

#### and inductive reasoning

Adaptation to new situations  
Decision making  
Working in an interdisciplinary environment  
Equity and Inclusion  
Demonstration of social, professional and moral responsibility and sensitivity to gender issues  
Critical thinking  
Promoting free, creative and inductive reasoning  
Examining a patient  
Evaluate clinical cases, order laboratory tests, make differential diagnoses, and negotiate a management plan  
Communicate effectively in a medical environment  
Apply scientific principles, methods and knowledge to medical practice and research

### 3 COURSE CONTENT

#### Theoretical:

1. Examination methods in Otorhinolaryngology, head and neck surgery.
2. Physiology and pathophysiology of ear, nose and paranasal sinuses, oral cavity, pharynx, salivary glands, larynx, head and neck.
3. Anatomy of ear, nose and paranasal sinuses, oral cavity, pharynx, salivary glands, larynx, head and neck.
4. Ear pathology.
5. Pathology of the nose and paranasal sinuses.
6. Pathology of the oral cavity and pharynx.
7. Salivary gland pathology.
8. Disorders of the facial nerve.
9. Pathology of the larynx.
10. Neck pathology.
11. Pathology of voice and swallowing disorders.
12. Neoplasms of ears, nasal and paranasal sinuses, oral cavity, pharynx, salivary glands, larynx, head and neck.
13. Gastroesophageal reflux and ENT manifestations.
14. Allergy in otorhinolaryngology.
15. Sleep apnea and otorhinolaryngological causes.
16. Facial plastic surgery

#### Laboratories

1. Nasal allergy, investigation of sleep disorders.
2. Salivary endoscopy.
3. Audiology-Neurotology, vertigo and tinnitus.
4. Endoscopy of nose and paranasal sinuses.

#### Tutorials

1. Clinical cases.
2. Basic surgical techniques.
3. Examination methods.

#### Clinical practice:

1. History.
2. Physical examination.
3. Clinical examination of patients
4. Examination of patients in the special outpatient clinics for rhinology and investigation of sleep disorders, audiology-neurotology-vertigo and tinnitus, endoscopies, salivary gland endoscopies.

### 4 LEARNING & TEACHING METHODS - EVALUATION

#### TEACHING METHOD

Face to face, Distance learning, etc.

Face to face

<b>USE OF INFORMATION &amp; COMMUNICATIONS TECHNOLOGY (ICT)</b> Use of ICT in Teaching, in Laboratory Education, in Communication with students	Use of ICT in Teaching Use of ICT in Laboratory Education Use of ICT in Communication with students
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<b>TEACHING ORGANIZATION</b> The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study/creation, project, creation, project. Etc.  The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards	<table border="1"> <thead> <tr> <th data-bbox="858 356 1118 405">Activity</th> <th data-bbox="1126 356 1402 405">Workload/semester</th> </tr> </thead> <tbody> <tr> <td data-bbox="858 416 1118 450">Lectures</td> <td data-bbox="1126 416 1402 450">26</td> </tr> <tr> <td data-bbox="858 461 1118 495">Tutoring</td> <td data-bbox="1126 461 1402 495">4</td> </tr> <tr> <td data-bbox="858 506 1118 539">Clinical Exercise</td> <td data-bbox="1126 506 1402 539">14</td> </tr> <tr> <td data-bbox="858 551 1118 584">Duties</td> <td data-bbox="1126 551 1402 584">3</td> </tr> <tr> <td data-bbox="858 595 1118 696">Bibliographic research &amp; analysis</td> <td data-bbox="1126 595 1402 696">43</td> </tr> <tr> <td data-bbox="858 707 1118 741"><b>Total</b></td> <td data-bbox="1126 707 1402 741"><b>90</b></td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	26	Tutoring	4	Clinical Exercise	14	Duties	3	Bibliographic research & analysis	43	<b>Total</b>	<b>90</b>
Activity	Workload/semester														
Lectures	26														
Tutoring	4														
Clinical Exercise	14														
Duties	3														
Bibliographic research & analysis	43														
<b>Total</b>	<b>90</b>														

<b>STUDENT EVALUATION</b> Description of the evaluation process  Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay/Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others  Please indicate all relevant information about the course assessment and how students are informed	<b>Student evaluation languages</b> Greek  <b>Method (Formative or Concluding)</b> Formative  <table border="1"> <thead> <tr> <th data-bbox="810 1025 1174 1104">Student evaluation methods</th> <th data-bbox="1182 1025 1465 1104">Percent</th> </tr> </thead> <tbody> <tr> <td data-bbox="810 1115 1174 1205">Written exam with multiple choice test</td> <td data-bbox="1182 1115 1465 1205">50</td> </tr> <tr> <td data-bbox="810 1216 1174 1272">Oral exam</td> <td data-bbox="1182 1216 1465 1272">50</td> </tr> </tbody> </table>	Student evaluation methods	Percent	Written exam with multiple choice test	50	Oral exam	50
Student evaluation methods	Percent						
Written exam with multiple choice test	50						
Oral exam	50						

## 5 Suggested Bibliography

- Anil K. Lalwani, Modern OTORHINOLARYNGOLOGY Head and Neck Surgery: DIAGNOSIS & TREATMENT, P.X. Paschalidis Publications, Broken Hill publishers Ltd.
- Konstantinidis I., Bizakis I., OTORHINOLARYNGOLOGY HEAD AND NECK SURGERY, Havales A-Hatzisymeon K. OE, 2012, ISBN: 978-960-6894-48-0

## COURSE OUTLINE

### 1 GENERAL

<b>SCHOOL</b>	SCHOOL OF HEALTH SCIENCES		
<b>DEPARTMENT</b>	DEPARTMENT OF MEDICINE		
<b>LEVEL OF STUDIES</b>	ISCED level 6 – Bachelor’s or equivalent level		
<b>COURSE CODE</b>		<b>SEMESTER</b>	7
<b>COURSE TITLE</b>	FORENSIC MEDICINE AND TOXICOLOGY		
<b>TEACHING ACTIVITIES</b> If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labsetc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.	<b>TEACHING HOURS PER WEEK</b>		<b>ECTS CREDITS</b>
	4		3.0
<b>COURSE TYPE</b> Background, General Knowledge, Scientific Area, Skill Development	Scientific Area		
<b>PREREQUISITES</b>	No		
<b>TEACHING &amp; EXAMINATION LANGUAGE:</b>	Greek		
<b>COURSE OFFERED TO ERASMUS STUDENTS:</b>			
<b>COURSE URL:</b>			

### 2 LEARNING OUTCOMES

<p><b>Learning Outcomes</b> Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</p>
<p>Knowledge and experience in diagnosing the main causes of death. → Knowledge and experience in dealing with situations associated with abuse. → Dealing with incidents related to the law (physical and sexual abuse, drug addiction, etc.). → Knowledge about the most common poisons and other toxic substances. Effect of these on the human body</p>

<p><b>General Skills</b> Name the desirable general skills upon successful completion of the module</p> <p>Search, analysis and synthesis of data and information, ICT Use, Adaptation to new situations, Decision making, Autonomous work, Teamwork, Working in an international environment, Working in an interdisciplinary environment, Production of new research ideas</p>
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Project design and management Equity and Inclusion, Respect for the natural environment, Sustainability, Demonstration of social, professional and moral responsibility and sensitivity to gender issues, Critical thinking, Promoting free, creative and inductive reasoning

Adaptation to new situations  
Autonomous work  
Demonstrating social, professional and ethical responsibility and sensitivity to gender issues

### 3 COURSE CONTENT

- 1) Introduction to forensics. History and subject matter of forensic science. Branches of forensic science. Forensics in Greece.
- 2) Death. Types of death. Postmortem phenomena (corpse stiffness, corpse postures, putrefaction, etc.).
- 3) Autopsy - necropsy - necropsy. Criteria and determination of time of death. Laboratory Tests. Forensic reports.
- 4) Sudden deaths.
- 5) Violent deaths: The importance of autopsy in violent deaths. The contribution of forensics to crime.
- 6) Violent Deaths: Deaths by firearms. Deaths from nyson and cutting organ. Forensic investigation.
- 7) Violent deaths: Asphyxiation deaths. Forensic investigation. Car accidents.
- 8) Violent deaths: Deaths from natural causes (lightning, etc.). Deprivation deaths (starvation). Deaths from thermal injuries. Forensic investigation.
- 9) Childhood deaths.
- 10) Laboratory Forensics (DNA, hairs, etc.).
- 11) Clinical forensics. Bodily injuries. Sexual abuse.
- 12) Introduction to toxicology. Subject and branches of toxicology.
- 13) General toxicology. Deaths from drugs. Clinical and laboratory forensic investigation. Framework law on addictive substances. Diagnostic criteria for drug addiction.
- 14) Special toxicology. Emphasis on the toxic substances encountered in everyday forensic practice (alcohol, poisons, etc.).

### 4 LEARNING & TEACHING METHODS - EVALUATION

<b>TEACHING METHOD</b> Face to face, Distance learning, etc.	Face to face										
<b>USE OF INFORMATION &amp; COMMUNICATIONS TECHNOLOGY (ICT)</b> Use of ICT in Teaching, in Laboratory Education, in Communication with students	Use of ICT in Teaching Use of ICT in Laboratory Education Use of ICT in Communication with students										
<b>TEACHING ORGANIZATION</b> The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study/creation, project, creation, project. Etc.  The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards	<table border="1"> <thead> <tr> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>52</td> </tr> <tr> <td>Tutoring</td> <td>18</td> </tr> <tr> <td>Laboratory Exercise</td> <td>18</td> </tr> <tr> <td><b>Total</b></td> <td><b>88</b></td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	52	Tutoring	18	Laboratory Exercise	18	<b>Total</b>	<b>88</b>
Activity	Workload/semester										
Lectures	52										
Tutoring	18										
Laboratory Exercise	18										
<b>Total</b>	<b>88</b>										

<b>STUDENT EVALUATION</b> Description of the evaluation process  Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay/Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others  Please indicate all relevant information about the course assessment and how students are informed	<b>Student evaluation languages</b> Greek  <b>Method (Formative or Concluding)</b> Formative  <table border="1"> <thead> <tr> <th style="background-color: #e0e0e0;">Student evaluation methods</th> <th style="background-color: #e0e0e0;">Percent</th> </tr> </thead> <tbody> <tr> <td>Written exam with multiple choice test</td> <td>50</td> </tr> <tr> <td>Written exam with essay answer questions</td> <td>50</td> </tr> </tbody> </table>	Student evaluation methods	Percent	Written exam with multiple choice test	50	Written exam with essay answer questions	50
Student evaluation methods	Percent						
Written exam with multiple choice test	50						
Written exam with essay answer questions	50						

## 5 Suggested Bibliography

- A. Koutselinis "Forensics" Parisianos Publications 2002.
- D. Psaroulis "Forensics" Third edition University Studio Press 2018

## COURSE OUTLINE

### 1 GENERAL

<b>SCHOOL</b>	SCHOOL OF HEALTH SCIENCES		
<b>DEPARTMENT</b>	DEPARTMENT OF MEDICINE		
<b>LEVEL OF STUDIES</b>	ISCED level 6 – Bachelor's or equivalent level		
<b>COURSE CODE</b>		<b>SEMESTER</b>	7
<b>COURSE TITLE</b>	VASCULAR ENDOVASCULAR SURGERY		
<b>TEACHING ACTIVITIES</b> If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labsetc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.	<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>	
	3	3.0	

<b>COURSE TYPE</b> Background, General Knowledge, Scientific Area, Skill Development	Scientific Area
<b>PREREQUISITES</b>	No
<b>TEACHING &amp; EXAMINATION LANGUAGE:</b>	Greek
<b>COURSE OFFERED TO ERASMUS STUDENTS:</b>	
<b>COURSE URL:</b>	

## 2 LEARNING OUTCOMES

<b>Learning Outcomes.</b>
<ul style="list-style-type: none"> <li>-Dedicated knowledge and clinical experience in the diagnosis and management of vascular diseases.</li> <li>-Surgical exposures in vascular anatomy</li> <li>-Principles in endovascular management of arterial and venous pathologies.</li> <li>-Open surgical, endovascular and hybrid revascularization of arterial diseases of thoracoabdominal, mesenteric and lower limb arterial pathologies.</li> <li>-Basic and advanced surgical and endovascular treatment options in the creation and restoration of vascular options in patients with end-stage kidney disease.</li> <li>-Principles of effects of radiation and radioprotection measures.</li> </ul>

<b>General Skills</b>
Name the desirable general skills upon successful completion of the module
<p>Search, analysis and synthesis of data and information, ICT Use, Adaptation to new situations, Decision making, Autonomous work, Teamwork, Working in an international environment, Working in an interdisciplinary environment, Production of new research ideas</p> <p>Project design and management Equity and Inclusion, Respect for the natural environment, Sustainability, Demonstration of social, professional and moral responsibility and sensitivity to gender issues, Critical thinking, Promoting free, creative and inductive reasoning</p>
<p>Adaptation to new situations</p> <p>Decision making</p> <p>Working in an interdisciplinary environment</p> <p>Critical thinking</p> <p>Promoting free, creative and inductive reasoning</p> <p>Examining a patient</p> <p>Evaluate clinical cases, order laboratory tests, make differential diagnoses, and negotiate a management plan</p> <p>Communicate effectively in a medical environment</p> <p>Apply scientific principles, methods and knowledge to medical practice and research</p>

### 3 COURSE CONTENT

- Atherosclerotic vessel disease. Medical history, clinical examination, adjunct diagnostic tools.
- Peripheral arterial disease (aorto-iliac, femoro-popliteal and femoro-distal arterial axis). Clinical examination radiological interpretation and surgical management.
- Atherosclerotic disease of upper limbs-Etiology and modes of management.
- Diseases of thoracoabdominal aorta. Surgical endovascular and hybrid treatment options.
- Carotid artery disease. Surgical and endovascular solutions.
- Mesenteric arterial pathologies. Diagnosis and management.
- Vascular trauma. Triage, surgical revascularization.
- Vascular access-surgical endovascular and hybrid procedures.
- Diagnosis and management of Venous Thromboembolic disease-deep venous thrombosis, post-thrombotic syndrome.
- Varicose veins of lower legs and superficial venous thrombosis diagnosis and treatment protocol.
- Lymphoedema. Diagnosis and management.
- Surgical grafts and materials.
- Endovascular materials and endografts-indications for use.
- Radiation protection
- Vasculitis and pathologic systemic diseases involving the arterial system.
- Audits/Bibliographic updates
- Participation in Academic goals of the Clinic.

### 4 LEARNING & TEACHING METHODS - EVALUATION

<b>TEACHING METHOD</b> Face to face, Distance learning, etc.	Face to face e-learning (if needed)										
<b>USE OF INFORMATION &amp; COMMUNICATIONS TECHNOLOGY (ICT)</b> Use of ICT in Teaching, in Laboratory Education, in Communication with students	Use of ICT in Teaching Use of ICT in Clinical Education Use of ICT in Communication with students										
<b>TEACHING ORGANIZATION</b> The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study/creation, project, creation, project. Etc.  The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards	<table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="background-color: #f2f2f2;">Activity</th> <th style="background-color: #f2f2f2;">Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td style="text-align: center;">13</td> </tr> <tr> <td>Clinical Exercise</td> <td style="text-align: center;">26</td> </tr> <tr> <td>Bibliographic research &amp; analysis</td> <td style="text-align: center;">50</td> </tr> <tr> <td><b>Total</b></td> <td style="text-align: center;"><b>89</b></td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	13	Clinical Exercise	26	Bibliographic research & analysis	50	<b>Total</b>	<b>89</b>
Activity	Workload/semester										
Lectures	13										
Clinical Exercise	26										
Bibliographic research & analysis	50										
<b>Total</b>	<b>89</b>										
<b>STUDENT EVALUATION</b> Description of the evaluation process	<b>Student evaluation languages</b> Greek										

Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay/Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others

Please indicate all relevant information about the course assessment and how students are informed

**Method (Formative or Concluding)**

Formative

Student evaluation methods	Percent
Written exam with multiple choice test	50
Written exam with essay answer questions	50

**5 Suggested Bibliography**

- Vascular and Endovascular Surgery, 5th Edition. Jonathan Beard, Peter Gaines, Ian Loftus. Saunders Ltd. 2013. ISBN 9780702057014.
- Βασικές Αρχές Αγγειοχειρουργικής. Κ.Δ. Κτενίδης. University Studio Press. 2010. ISBN 9789601219851

**COURSE OUTLINE**

**1 GENERAL**

<b>SCHOOL</b>	SCHOOL OF HEALTH SCIENCES		
<b>DEPARTMENT</b>	DEPARTMENT OF MEDICINE		
<b>LEVEL OF STUDIES</b>	ISCED level 6 – Bachelor’s or equivalent level		
<b>COURSE CODE</b>		<b>SEMESTER</b>	8
<b>COURSE TITLE</b>	PULMONOLOGY		
<b>TEACHING ACTIVITIES</b> If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labsetc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.		<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>
		4	4.0

<b>COURSETYPE</b> Background, General Knowledge, Scientific Area, Skill Development	Scientific Area
<b>PREREQUISITES</b>	No
<b>TEACHING &amp; EXAMINATION LANGUAGE:</b>	Greek
<b>COURSE OFFERED TO ERASMUSSTUDENTS:</b>	
<b>COURSE URL:</b>	

## 2 LEARNING OUTCOMES

<b>Learning Outcomes</b> Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.
<p>After successful completion of the course the student will be able to:</p> <ul style="list-style-type: none"> <li>- Recognize the symptoms that lead to the diagnosis of a respiratory disease</li> <li>- Obtain the clinical history from the patient</li> <li>- Perform the clinical examination of the respiratory system</li> <li>- Arterial blood draw to perform arterial blood gases test, interpret the patient's acid-base balance, and perform a thoracocentesis (pleural fluid aspiration)</li> <li>- Interpret chest X-ray and chest computed tomography</li> <li>- Synthesize findings setting the working diagnosis (the differential diagnosis)</li> <li>- Suggest further tests to confirm the diagnosis or rule out other diseases</li> <li>- Suggest the treatment of the patient</li> <li>- Suggest further monitoring /follow up of the patient</li> </ul>

<b>General Skills</b> Name the desirable general skills upon successful completion of the module
<p>Search, analysis and synthesis of data and information, ICT Use, Adaptation to new situations, Decision making, Autonomous work, Teamwork, Working in an international environment, Working in an interdisciplinary environment, Production of new research ideas</p> <p>Project design and management Equity and Inclusion, Respect for the natural environment, Sustainability, Demonstration of social, professional and moral responsibility and sensitivity to gender issues, Critical thinking, Promoting free, creative and inductive reasoning</p>
<p>Search, analysis and synthesis of data and information</p> <p>Adaptation to new situations</p> <p>Decision making</p> <p>Working in an interdisciplinary environment</p> <p>Critical thinking</p> <p>Promoting free, creative and inductive reasoning</p> <p>Examining a patient</p> <p>Evaluate clinical cases, order laboratory tests, make differential diagnoses, and negotiate a management plan</p> <p>Communicate effectively in a medical environment</p> <p>Apply scientific principles, methods and knowledge to medical practice and research</p>

### 3 COURSE CONTENT

1. Elements of Anatomy-Physiology of the respiratory system - Pulmonary function tests (PFTs)
2. Diagnostic techniques in Pulmonology
3. Access to chest X-ray and chest CT
4. Diagnostic approach for Cough and Hemoptysis
5. Diagnostic approach for Chest pain and Dyspnea
6. Infections of the respiratory system (community-acquired pneumonia – pulmonary tuberculosis - bronchitis).
7. Bronchial Asthma
8. Chronic Obstructive Pulmonary Disease
9. Acute and chronic respiratory failure – Sleep Apnea Syndrome
10. Pulmonary embolism – Pulmonary vascular disorders
11. Lung Cancer – Mesothelioma – Smoking Cessation
12. Interstitial lung diseases
13. Occupational lung diseases
14. Pleural effusion – Pneumothorax
15. Sleep related breathing disorders

Workshops or tutorials or clinical practice

1. Department of Respiratory Medicine and the Emergency Department
2. Respiratory Failure Laboratory
3. Pulmonary Function Laboratory
4. Sleep-wake Disorders Unit
5. Bronchoalveolar lavage Pulmonary Immunology Unit
6. Interventional Pulmonology – Lung Cancer Unit
7. Intermediate Respiratory Care Unit

### 4 LEARNING & TEACHING METHODS - EVALUATION

<b>TEACHING METHOD</b> Face to face, Distance learning, etc.	Face to face										
<b>USE OF INFORMATION &amp; COMMUNICATIONS TECHNOLOGY (ICT)</b> Use of ICT in Teaching, in Laboratory Education, in Communication with students	Use of ICT in Teaching										
<b>TEACHING ORGANIZATION</b> The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study/creation, project, creation, project. Etc.  The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards	<table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>26</td> </tr> <tr> <td>Clinical Exercise</td> <td>20</td> </tr> <tr> <td>Tutoring</td> <td>6</td> </tr> <tr> <td><b>Total</b></td> <td><b>52</b></td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	26	Clinical Exercise	20	Tutoring	6	<b>Total</b>	<b>52</b>
Activity	Workload/semester										
Lectures	26										
Clinical Exercise	20										
Tutoring	6										
<b>Total</b>	<b>52</b>										
<b>STUDENT EVALUATION</b> Description of the evaluation process	<b>Student evaluation languages</b> Greek										

Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay/Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others

Please indicate all relevant information about the course assessment and how students are informed

**Method (Formative or Concluding)**

Formative

Student evaluation methods	Percent
Written exam with multiple choice test	50
Written exam with essay answer questions	20
Oral exam	10
Patient clinical examination	10
Public presentation	10

**5 Suggested Bibliography**

1. Principles of Pulmonary Medicine 8th Edition  
by Steven E. Weinberger MD MACP FRCP (Author), Barbara A. Cockrill MD (Author), Jess Mandel MD FACP (Author)  
Elsevier Publisher
2. Oxford Handbook of Respiratory Medicine (Oxford Medical Handbooks) Paperback – 14 May 2021  
by Stephen J Chapman (Author), Grace V Robinson (Author), Rahul Shrimanker (Author), Chris D Turnbull (Author), John M Wrightson (Author)  
Oup Oxford

**COURSE OUTLINE**

**1 GENERAL**

<b>SCHOOL</b>	SCHOOL OF HEALTH SCIENCES		
<b>DEPARTMENT</b>	DEPARTMENT OF MEDICINE		
<b>LEVEL OF STUDIES</b>	ISCED level 6 – Bachelor’s or equivalent level		
<b>COURSE CODE</b>		<b>SEMESTER</b>	8
<b>COURSE TITLE</b>	UROLOGY		
<b>TEACHING ACTIVITIES</b> If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labsetc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.	<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>	
	3,6	4.0	

<b>COURSE TYPE</b> Background, General Knowledge, Scientific Area, Skill Development	Background, Scientific Area
<b>PREREQUISITES</b>	No
<b>TEACHING &amp; EXAMINATION LANGUAGE:</b>	Greek
<b>COURSE OFFERED TO ERASMUS STUDENTS:</b>	
<b>COURSE URL:</b>	

## 2 LEARNING OUTCOMES

<p><b>Learning Outcomes</b> Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</p>
<p>Upon successful completion of the course, students will be able to:</p> <ul style="list-style-type: none"> <li>- Diagnose all diseases of the genitourinary system and implement appropriate treatments.</li> <li>- Establish differential diagnosis with other diseases and syndromes, and determine their treatment plans.</li> <li>- Apply methods for the prevention of diseases, such as prostate cancer etc.</li> <li>- Understand and execute the basic steps of surgical techniques relevant to the genitourinary system, along with diagnosing potential surgical complications.</li> </ul>

<p><b>General Skills</b></p> <p>Name the desirable general skills upon successful completion of the module</p> <p>Search, analysis and synthesis of data and information, ICT Use, Adaptation to new situations, Decision making, Autonomous work, Teamwork, Working in an international environment, Working in an interdisciplinary environment, Production of new research ideas</p> <p>Project design and management Equity and Inclusion, Respect for the natural environment, Sustainability, Demonstration of social, professional and moral responsibility and sensitivity to gender issues, Critical thinking, Promoting free, creative and inductive reasoning</p>
<p>Search, analysis and synthesis of data and information</p> <p>ICT Use</p> <p>Adaptation to new situations</p> <p>Decision making</p> <p>Working in an interdisciplinary environment</p> <p>Equity and Inclusion</p> <p>Demonstration of social, professional and moral responsibility and sensitivity to gender issues</p> <p>Critical thinking</p> <p>Promoting free, creative and inductive reasoning</p> <p>Examining a patient</p> <p>Evaluate clinical cases, order laboratory tests, make differential diagnoses, and negotiate a management plan</p> <p>Communicate effectively in a medical environment</p> <p>Apply scientific principles, methods and knowledge to medical practice and research</p>

### 3 COURSE CONTENT

Theoretical:

- 1) Introduction and scope of urology. Anatomy, embryology of the urogenital. Symptoms and Clinical examination,
- 2)Diagnosis of urological patient,
- 3) Quantitative and qualitative disorders of urination,
- 4) Laboratory and imaging examination of urogenital,
- 5) Lithiasis of the urogenital system,
- 6) Neoplasms of kidney & upper urinary tract,
- 7) Inflammation of the genitourinary system,
- 8) Pathophysiology of obstruction in the urinary tract Cystoureteral reflux disease,
- 9) Injuries of the urogenital system,
- 10) Benign prostatic hyperplasia,
- 11) Emergency Urological Problems,
- 12) Prostate neoplasms,
- 13) Bladder neoplasms,
- 14) Bladder neoplasms - treatment - urinary diversion,
- 15) Neoplasms of the testicles and external genital organs of the male,
- 16) Congenital urinary tract anomalies,
- 17) Congenital anomalies and other diseases of the male external genital organs,
- 18) Introduction to Neurourology,
- 19). Elements of urodynamics,
- 20) Urinary incontinence,
- 21) Male sexual dysfunction,
- 22) Male Infertility - Sterility,
- 23) Pediatric Urology,
- 24) Student concerns on Urological Issues

### 4 LEARNING & TEACHING METHODS - EVALUATION

<b>TEACHING METHOD</b> Face to face, Distance learning, etc.	Face to face										
<b>USE OF INFORMATION &amp; COMMUNICATIONS TECHNOLOGY (ICT)</b> Use of ICT in Teaching, in Laboratory Education, in Communication with students	Use of ICT in Teaching Use of ICT in Laboratory Education Use of ICT in Communication with students										
<b>TEACHING ORGANIZATION</b> The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study/creation, project, creation, project. Etc.  The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards	<table border="1"> <thead> <tr> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>26</td> </tr> <tr> <td>Clinical Exercise</td> <td>12</td> </tr> <tr> <td>Bibliographic research &amp; analysis</td> <td>62</td> </tr> <tr> <td><b>Total</b></td> <td><b>100</b></td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	26	Clinical Exercise	12	Bibliographic research & analysis	62	<b>Total</b>	<b>100</b>
Activity	Workload/semester										
Lectures	26										
Clinical Exercise	12										
Bibliographic research & analysis	62										
<b>Total</b>	<b>100</b>										

<b>STUDENT EVALUATION</b> Description of the evaluation process  Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay/Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others  Please indicate all relevant information about the course assessment and how students are informed	<b>Student evaluation languages</b> Greek  <b>Method (Formative or Concluding)</b> Formative  <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="background-color: #e0e0e0;">Student evaluation methods</th> <th style="background-color: #e0e0e0;">Percent</th> </tr> </thead> <tbody> <tr> <td>Written exam with multiple choice test</td> <td style="text-align: center;">100</td> </tr> </tbody> </table>	Student evaluation methods	Percent	Written exam with multiple choice test	100
Student evaluation methods	Percent				
Written exam with multiple choice test	100				

## 5 Suggested Bibliography

1. Smith's General Urology
2. Oxford Handbook of Urology

## COURSE OUTLINE

### 1 GENERAL

<b>SCHOOL</b>	SCHOOL OF HEALTH SCIENCES		
<b>DEPARTMENT</b>	DEPARTMENT OF MEDICINE		
<b>LEVEL OF STUDIES</b>	ISCED level 6 – Bachelor's or equivalent level		
<b>COURSE CODE</b>		<b>SEMESTER</b>	8
<b>COURSE TITLE</b>	RADIOLOGY II		
<b>TEACHING ACTIVITIES</b> If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labsetc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.	<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>	
	7,8	7.0	

<b>COURSETYPE</b> Background, General Knowledge, Scientific Area, Skill Development	Scientific Area
<b>PREREQUISITES</b>	No
<b>TEACHING &amp; EXAMINATION LANGUAGE:</b>	Greek
<b>COURSE OFFERED TO ERASMUSSTUDENTS:</b>	
<b>COURSE URL:</b>	

## 2 LEARNING OUTCOMES

### Learning Outcomes

Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.

Upon successful completion of the module the student will be able to:

- Distinguishes normal from pathological imaging findings.
- Diagnoses with imaging, clinical and laboratory criteria basic diseases in the aforementioned systems.
- Knows the hierarchy of use of imaging investigations in cases of acute clinical conditions.
- Be aware of the indications, contraindications, efficacy and possible complications of the application of imaging-guided minimally invasive percutaneous methods and indicate their use in diseases of the aforementioned systems, where appropriate.

### General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information, ICT Use, Adaptation to new situations, Decision making, Autonomous work, Teamwork, Working in an international environment, Working in an interdisciplinary environment, Production of new research ideas  
Project design and management Equity and Inclusion, Respect for the natural environment, Sustainability, Demonstration of social, professional and moral responsibility and sensitivity to gender issues, Critical thinking, Promoting free, creative and inductive reasoning

Search, analysis and synthesis of data and information,  
Adaptation to new situations  
Decision making  
Working in an interdisciplinary environment  
Equity and Inclusion  
Demonstration of social, professional and moral responsibility and sensitivity to gender issues  
Critical thinking  
Promoting free, creative and inductive reasoning  
Examining a patient  
Evaluate clinical cases, order laboratory tests, make differential diagnoses, and negotiate a management plan  
Communicate effectively in a medical environment  
Apply scientific principles, methods and knowledge to medical practice and research

### 3 COURSE CONTENT

#### A. Theoretical:

- Techniques and applications of the latest imaging methods for the investigation of diseases of the liver, biliary ducts, pancreas, genitourinary system, breast and Central Nervous System.
- Radioanatomy of liver – biliary ducts – pancreas – spleen.
- Focal and diffuse liver lesions.
- Biliary diseases.
- Inflammations and neoplasms of the pancreas.
- Spleen diseases – injuries of intra-abdominal organs.
- Invasive radiological methods in diseases of the liver, pancreas, bile ducts, spleen and intra-abdominal organs.
- Acute abdomen - correlation of clinical/imaging findings - evaluation using imaging methods.
- Imaging methods in the study of the urinary system – Radioanatomy.
- Congenital diseases of the urinary system - Cystic kidney diseases - Lithiasis.
- Inflammatory diseases of the kidneys- Trauma to the urinary tract.
- Neoplasms of kidneys, ureters, bladder.
- Adrenal gland diseases.
- Female and male pelvis: Imaging investigation.
- Diseases of the genital tract of men and women.
- Invasive radiological methods in diseases and trauma of the urinary system, renovascular hypertension, male and female pelvis.
- Diseases of the urinary system and retroperitoneal space in children.
- Diseases of the intra-abdominal organs in children - Clinical problems & imaging.
- Vascular diseases: diagnosis & treatment by radiological methods.
- Breast diseases – imaging semantics.
- Imaging techniques in CNS investigation, MRI - CNS: Techniques and applications.
- CNS imaging anatomy.
- Inflammatory diseases of the CNS.
- Central Nervous System: Intracranial neoplasms & spinal cord neoplasms and spinal cord neoplasms.
- CNS: Vascular Lesions - Radiological invasive methods in their treatment.
- Demyelinating and degenerative diseases of the brain and spinal cord.
- CNS trauma.
- CNS diseases in children.

#### B. Clinical tutorials:

Demonstrations and analyses of imaging tests in the field of knowledge and as a continuation of each theoretical module, differential diagnostic approach, fully justified final diagnosis.

#### C. Clinical practice:

Participation of small groups of students in morning clinical meetings and afternoon clinical exercises.

### 4 LEARNING & TEACHING METHODS - EVALUATION

<b>TEACHING METHOD</b> Face to face, Distance learning, etc.	Face to face
<b>USE OF INFORMATION &amp; COMMUNICATIONS TECHNOLOGY (ICT)</b> Use of ICT in Teaching, in Laboratory Education, in Communication with students	Use of ICT in Teaching Use of ICT in Laboratory Education Use of ICT in Communication with students

**TEACHING ORGANIZATION**

The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study/creation, project, creation, project. Etc.

The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards

Activity	Workload/semester
Lectures	54
Laboratory Exercise	11
Clinical Exercise	36
Bibliographic research & analysis	75
<b>Total</b>	<b>176</b>

**STUDENT EVALUATION**

Description of the evaluation process

Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay/Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others

Please indicate all relevant information about the course assessment and how students are informed

**Student evaluation languages**

Greek

**Method (Formative or Concluding)**

Formative

Student evaluation methods	Percent
Written exam with multiple choice test	100

**5 Suggested Bibliography**

-WILLIAM HERRING, LEARNING RADIOLOGY BY RECOGNIZING THE BASICS, KONSTANTARAS MEDICAL PUBLICATIONS.  
 - LASSERRE ANKE, BLOHM LUDWIG, HANDBOOK OF RADIOLOGY, PARISIAN ANONYMOUS PUBLISHING IMPORT TRADING COMPANY.

## COURSE OUTLINE

### 1 GENERAL

<b>SCHOOL</b>	SCHOOL OF HEALTH SCIENCES		
<b>DEPARTMENT</b>	DEPARTMENT OF MEDICINE		
<b>LEVEL OF STUDIES</b>	ISCED level 6 – Bachelor’s or equivalent level		
<b>COURSE CODE</b>		<b>SEMESTER</b>	8
<b>COURSE TITLE</b>	ONCOLOGY		
<b>TEACHING ACTIVITIES</b> If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labsetc. If the ECTS Credits are awarded to the whole course, then please indicate theteaching hours per week and the corresponding ECTS Credits.		<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>
		3	3.0
<b>COURSE TYPE</b> Background, General Knowledge, Scientific Area, Skill Development	Scientific Area		
<b>PREREQUISITES</b>	No		
<b>TEACHING &amp; EXAMINATION LANGUAGE:</b>	English		
<b>COURSE OFFERED TO ERASMUSSTUDENTS:</b>			
<b>COURSE URL:</b>			

### 2 LEARNING OUTCOMES

<p><b>Learning Outcomes</b> Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</p>
<p>Following the successful completion of the teaching courses and clinical exercise, the student will be able to :</p> <ol style="list-style-type: none"> <li>1. Prescribe the basic diagnostic procedures for cancer patients</li> <li>2. Have a basic knowledge of chemotherapy and radiotherapy administration</li> <li>3. Recognize and treat toxicities from chemotherapy and radiotherapy</li> <li>4. Organize the follow-up of cancer patients after therapy</li> </ol>

<p><b>General Skills</b></p> <p>Name the desirable general skills upon successful completion of the module</p> <p>Search, analysis and synthesis of data and information, ICT Use, Adaptation to new situations, Decision making, Autonomous work, Teamwork, Working in an international environment, Working in an interdisciplinary environment, Production of new research ideas Project design and management Equity and Inclusion, Respect for the natural environment, Sustainability, Demonstration</p>
--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

of social, professional and moral responsibility and sensitivity to gender issues, Critical thinking, Promoting free, creative and inductive reasoning

Adaptation to new situations  
 Decision making  
 Working in an interdisciplinary environment  
 Promoting free, creative and inductive reasoning  
 Examining a patient  
 Evaluate clinical cases, order laboratory tests, make differential diagnoses, and negotiate a management plan  
 Communicate effectively in a medical environment  
 Apply scientific principles, methods and knowledge to medical practice and research

### 3 COURSE CONTENT

Theoretical Background:

1. Basic principles of chemotherapy
2. Basic principles of tumor biology
3. Basic principles of drug resistance
4. Angiogenesis and metastasis
5. Targeted therapies
6. Hormonal therapy for breast and prostate cancer
7. Basic principles of Radiotherapy
8. Radiotherapy and chemotherapy for breast cancer -
9. Radiotherapy and chemotherapy for lung cancer
10. Radiotherapy and chemotherapy for gastrointestinal cancer
11. Radiotherapy and chemotherapy for skin cancer
12. Radiotherapy and chemotherapy for head-neck cancer
13. Radiotherapy and chemotherapy for brain tumors
14. Radiotherapy and chemotherapy for gynecological cancer
15. Radiotherapy and chemotherapy for bladder cancer
16. Radiotherapy and chemotherapy for prostate cancer
17. Radiotherapy and chemotherapy for colorectal cancer
18. Radiotherapy and chemotherapy for sarcomas
19. Cancer immunotherapy

Clinical experience:

1. Physical examination of cancer patients,
2. Follow-up of cancer patients
2. Radiotherapy Simulation and Treatment planning
3. External beam Radiotherapy and Brachytherapy
4. Chemotherapy administration

### 4 LEARNING & TEACHING METHODS - EVALUATION

<b>TEACHING METHOD</b> Face to face, Distance learning, etc.	Face to face
<b>USE OF INFORMATION &amp; COMMUNICATIONS TECHNOLOGY (ICT)</b> Use of ICT in Teaching, in Laboratory Education, in Communication with students	Use of ICT in Teaching Use of ICT in Laboratory Education Use of ICT in Communication with students

**TEACHING ORGANIZATION**

The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study/creation, project, creation, project. Etc.

The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards

Activity	Workload/semester
Lectures	26
Clinical Exercise	12
Bibliographic research & analysis	32
<b>Total</b>	<b>90</b>

**STUDENT EVALUATION**

Description of the evaluation process

Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay/Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others

Please indicate all relevant information about the course assessment and how students are informed

**Student evaluation languages**

Greek

**Method (Formative or Concluding)**

Formative

Student evaluation methods	Percent
Written exam with multiple choice test	40
Oral exam	40
Report	20

**5 Suggested Bibliography**

DeVita, Hellman, and Rosenberg's Cancer: Principles & Practice of Oncology

Perez & Brady's Principles and Practice of Radiation Oncology

## COURSE OUTLINE

### 1 GENERAL

<b>SCHOOL</b>	SCHOOL OF HEALTH SCIENCES		
<b>DEPARTMENT</b>	DEPARTMENT OF MEDICINE		
<b>LEVEL OF STUDIES</b>	ISCED level 6 – Bachelor’s or equivalent level		
<b>COURSE CODE</b>		<b>SEMESTER</b>	8
<b>COURSE TITLE</b>	INTERNAL MEDICINE I		
<b>TEACHING ACTIVITIES</b> If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labsetc. If the ECTS Credits are awarded to the whole course, then please indicate theteaching hours per week and the corresponding ECTS Credits.	<b>TEACHING HOURS PER WEEK</b>		<b>ECTS CREDITS</b>
	8		8.0
<b>COURSE TYPE</b> Background, General Knowledge, Scientific Area, Skill Development	Scientific Area		
<b>PREREQUISITES</b>	No		
<b>TEACHING &amp; EXAMINATION LANGUAGE:</b>	Greek		
<b>COURSE OFFERED TO ERASMUSSTUDENTS:</b>			
<b>COURSE URL:</b>			

### 2 LEARNING OUTCOMES

<p><b>Learning Outcomes</b> Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</p>
<p>Upon successful completion of the course the student will be able to:</p> <ul style="list-style-type: none"> <li>- Know the spectrum of human diseases and have a basic knowledge of the epidemiology, etiopathogenesis, symptoms and signs, and laboratory methods that are appropriate for their diagnosis</li> <li>- Take a history accurately and within a reasonable time and formulate it in a medically sound manner</li> <li>- Carry out a clinical examination and record his/her findings</li> <li>- Make diagnoses and select appropriate tests to confirm them</li> <li>-Develop differential diagnostic thinking and solve corresponding clinical problems</li> </ul>

<p><b>General Skills</b></p> <p>Name the desirable general skills upon successful completion of the module</p> <p>Search, analysis and synthesis of data and information, ICT Use, Adaptation to new situations, Decision making, Autonomous work, Teamwork, Working in an international environment, Working in an interdisciplinary environment, Production of new research ideas</p>
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Project design and management Equity and Inclusion, Respect for the natural environment, Sustainability, Demonstration of social, professional and moral responsibility and sensitivity to gender issues, Critical thinking, Promoting free, creative and inductive reasoning

The successful completion of the course enhances the students' ability to:

- communicate effectively in a medical environment
- apply ethical and legal principles in medical practice
- apply the principles, skills and knowledge of evidence-based medicine
- use information and information technology effectively in a medical environment
- apply scientific principles, methods and knowledge in medical practice

### 3 COURSE CONTENT

#### **Theoretical background:**

- Pathophysiology of haemostasis -Thrombotic states
- Major clinical manifestations of infections -laboratory approach
- Non-specific infections (respiratory, urinary)
- Non-specific infections (CNS, endocarditis)
- Fever of unknown origin
- Other infections (mononuclear syndromes from EBV, CMV, Toxoplasma -AIDS)
- Systemic auto-inflammatory diseases - the model of Familial Mediterranean fever
- Microbial, viral and parasitic infections of the gastrointestinal tract
- Pancreatic diseases
- Diseases of the esophagus
- Specific infections (brucellosis, leishmaniasis, malaria)
- Biliary diseases
- Stomach diseases
- Electrolytic disorders (K<sup>+</sup>/Na<sup>+</sup>)
- Pathogenesis - Clinical manifestations of diabetes mellitus
- Diabetic ketoacidosis - Non-keto hyperglycaemic hyperglycaemic state/ hyperosmosis
- Acid-base balance
- Calcium metabolism - Parathyroid disorders
- Thyroid diseases
- Addison's disease -Cushing's disease
- Hypothalamus – Pituitary
- Systemic autoimmunity - The systemic lupus erythematosus model
- Systemic autoimmunity - The rheumatoid arthritis model
- Arterial hypertension - Metabolic syndrome
- Antiphospholipid syndrome
- Pilar hypertension - Liver cirrhosis
- Hepatitis B and C diagnostic approach - Hepatocellular carcinoma
- Vasculitis
- Inflammatory diseases of the colon - Colon adenocarcinoma
- Anemias -Algorithmic diagnostic approach

#### **Clinical Practice:**

- Haemostasis disorders
- Diagnostic approach to acute fever
- Diagnostic approach to chronic fever
- Diagnostic approach to abdominal pain
- Diabetes mellitus - Complications
- Electrolytic disorders
- Diagnostic approach to endocrine diseases
- Diagnostic approach to autoimmune diseases - Diagnostic approach - Immunological profile
- Arterial hypertension

- Diagnostic approach to icterus
- Diagnostic approach to anaemias and haemostasis disorders.

#### 4 LEARNING & TEACHING METHODS - EVALUATION

<b>TEACHING METHOD</b> Face to face, Distance learning, etc.	Face to face														
<b>USE OF INFORMATION &amp; COMMUNICATIONS TECHNOLOGY (ICT)</b> Use of ICT in Teaching, in Laboratory Education, in Communication with students	Use of ICT in Teaching Use of ICT in Communication with students														
<b>TEACHING ORGANIZATION</b> The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study/creation, project, creation, project. Etc.  The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards	<table border="1"> <thead> <tr> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>78</td> </tr> <tr> <td>Clinical practice</td> <td>26</td> </tr> <tr> <td>Study of course material (slides, notes)</td> <td>10</td> </tr> <tr> <td>Study of suggested textbooks</td> <td>120</td> </tr> <tr> <td>Study of scientific articles</td> <td>6</td> </tr> <tr> <td><b>Total</b></td> <td><b>240</b></td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	78	Clinical practice	26	Study of course material (slides, notes)	10	Study of suggested textbooks	120	Study of scientific articles	6	<b>Total</b>	<b>240</b>
Activity	Workload/semester														
Lectures	78														
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<b>Total</b>	<b>240</b>														

<b>STUDENT EVALUATION</b> Description of the evaluation process  Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay/Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others  Please indicate all relevant information about the course assessment and how students are informed	<p><b>Student evaluation languages</b> Greek</p> <p><b>Method (Formative or Concluding)</b> Formative</p> <table border="1"> <thead> <tr> <th>Student evaluation methods</th> <th>Percent</th> </tr> </thead> <tbody> <tr> <td>Written exam with multiple choice test</td> <td>80</td> </tr> <tr> <td>Written exam with short answer questions</td> <td>20</td> </tr> </tbody> </table> <p>Full attendance of clinical practice courses is a prerequisite for participation in the exams</p>	Student evaluation methods	Percent	Written exam with multiple choice test	80	Written exam with short answer questions	20
Student evaluation methods	Percent						
Written exam with multiple choice test	80						
Written exam with short answer questions	20						

#### 5 Suggested Bibliography

**Books:**

- Mayo Clinic Internal Medicine Board Review (Mayo Clinic Scientific Press)
- Johns Hopkins Internal Medicine Board Review E-Book: Certification and Recertification
- CURRENT Medical Diagnosis and Treatment by MA. Papadakis, MW. Rabow, KR. McQuaid, M. Gandhi

**Journal:** New England Journal of Medicine

**Web:** [www.medscape.com/internalmedicine](http://www.medscape.com/internalmedicine)

## COURSE OUTLINE

### 1 GENERAL

<b>SCHOOL</b>	SCHOOL OF HEALTH SCIENCES		
<b>DEPARTMENT</b>	DEPARTMENT OF MEDICINE		
<b>LEVEL OF STUDIES</b>	ISCED level 6 – Bachelor’s or equivalent level		
<b>COURSE CODE</b>		<b>SEMESTER</b>	9
<b>COURSE TITLE</b>	TRAUMA & ORTHOPAEDICS		
<b>TEACHING ACTIVITIES</b> If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labsetc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.	<b>TEACHING HOURS PER WEEK</b>		<b>ECTS CREDITS</b>
	7		6.0
<b>COURSE TYPE</b> Background, General Knowledge, Scientific Area, Skill Development	Scientific Area		
<b>PREREQUISITES</b>	No		
<b>TEACHING &amp; EXAMINATION LANGUAGE:</b>	Greek		
<b>COURSE OFFERED TO ERASMUS STUDENTS:</b>			
<b>COURSE URL:</b>			

### 2 LEARNING OUTCOMES

<p><b>Learning Outcomes</b> Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</p> <p>The learning objectives of the course include:</p> <p>(a) the students to acquire the basic knowledge regarding the diagnosis and treatment of musculoskeletal trauma and orthopaedic diseases in both adults and children.</p> <p>(b) the students to familiarize with the Orthopedic patient in the Orthopedic Department, Orthopaedic Ward and Outpatient Clinics, the Emergency Department and the orthopaedic theatres</p> <p>(c) the acquisition of basic knowledge regarding the initial treatment of the injured patient from the Orthopedic point of view and form a basic treatment plan.</p> <p>Upon successful completion of the course, the student will be able to:</p> <ul style="list-style-type: none"> <li>- Examine an orthopedic patient</li> <li>- Diagnose the common orthopedic diseases</li> <li>- Form a basic treatment plan for the orthopaedic patient</li> </ul>
<p><b>General Skills</b></p>

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information, ICT Use, Adaptation to new situations, Decision making, Autonomous work, Teamwork, Working in an international environment, Working in an interdisciplinary environment, Production of new research ideas  
Project design and management Equity and Inclusion, Respect for the natural environment, Sustainability, Demonstration of social, professional and moral responsibility and sensitivity to gender issues, Critical thinking, Promoting free, creative and inductive reasoning

Search, analysis and synthesis of data and information

Adaptation to new situations

Decision making

Working in an interdisciplinary environment

Equity and Inclusion

Demonstration of social, professional and moral responsibility and sensitivity to gender issues

Critical thinking

Promoting free, creative and inductive reasoning

Examining a patient

Evaluate clinical cases, order laboratory tests, make differential diagnoses, and negotiate a management plan

Communicate effectively in a medical environment

Apply scientific principles, methods and knowledge to medical practice and research

### 3 COURSE CONTENT

Lectures and clinical skill courses

1. Introduction in Trauma and Orthopaedics
2. Medical history, clinical presentation, clinical examination, Diagnosis, Fractures
3. Joint inflammatory diseases
4. Fractures and healing of fractures
5. Skills lab – internal fixation
6. Osteoporosis & other metabolic diseases affecting the bone health
7. Hip fractures
8. Non-surgical means of limb immobilization
9. Osteoarthritis
10. Basic principles of open fracture management
11. Skills lab – external fixation
12. Peripheral Nerve injuries – Entrapment syndromes
13. Bone infection
14. Polytrauma – ATLS
15. Pelvic fractures
16. Femoral Fractures
17. Damage control orthopaedics
18. Lower back pain – sciatica
19. Injuries of the spine
20. Fractures of the humerus and elbow
21. Sport related injuries and tendon injuries
22. Knee injuries
23. Arthroscopy and other procedures
24. Injuries of the growing skeleton
25. Forearm injuries
26. Injuries of the hand and wrist
27. Orthopaedic Oncology
28. Tibia fractures and compartment syndrome
29. Foot and ankle injuries
30. Insertional tendinopathies
31. Bone infractions

- 32. Basic principles of medical research
- 33. Biomechanics
- 34. Injuries of the shoulder
- 35. Joint dislocations
- 36. Non-union
- 37. Distraction osteogenesis and Bone Transport
- 38. The Limping child

#### 4 LEARNING & TEACHING METHODS - EVALUATION

<b>TEACHING METHOD</b> Face to face, Distance learning, etc.	Face to face														
<b>USE OF INFORMATION &amp; COMMUNICATIONS TECHNOLOGY (ICT)</b> Use of ICT in Teaching, in Laboratory Education, in Communication with students	Use of ICT in Teaching Use of ICT in Laboratory Education Use of ICT in Communication with students														
<b>TEACHING ORGANIZATION</b> The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study/creation, project, creation, project. Etc.  The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards	<table border="1"> <thead> <tr> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>39</td> </tr> <tr> <td>Clinical Exercise</td> <td>22</td> </tr> <tr> <td>Bibliographic research &amp; analysis</td> <td>80</td> </tr> <tr> <td>Tutoring</td> <td>25</td> </tr> <tr> <td>Study visits</td> <td>14</td> </tr> <tr> <td><b>Total</b></td> <td><b>180</b></td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	39	Clinical Exercise	22	Bibliographic research & analysis	80	Tutoring	25	Study visits	14	<b>Total</b>	<b>180</b>
Activity	Workload/semester														
Lectures	39														
Clinical Exercise	22														
Bibliographic research & analysis	80														
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Study visits	14														
<b>Total</b>	<b>180</b>														

<b>STUDENT EVALUATION</b> Description of the evaluation process  Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay/Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others  Please indicate all relevant information about the course assessment and how students are informed	<b>Student evaluation languages</b> Greek  <b>Method (Formative or Concluding)</b> Formative  <table border="1"> <thead> <tr> <th>Student evaluation methods</th> <th>Percent</th> </tr> </thead> <tbody> <tr> <td>Written exam with multiple choice test</td> <td>100</td> </tr> </tbody> </table>	Student evaluation methods	Percent	Written exam with multiple choice test	100
Student evaluation methods	Percent				
Written exam with multiple choice test	100				

#### 5 Suggested Bibliography

Miller's Review of Orthopaedics, 8th Edition  
 Authors:  
 Mark D. Miller & Stephen R. Thompson

## COURSE OUTLINE

### 1 GENERAL

<b>SCHOOL</b>	SCHOOL OF HEALTH SCIENCES		
<b>DEPARTMENT</b>	DEPARTMENT OF MEDICINE		
<b>LEVEL OF STUDIES</b>	ISCED level 6 – Bachelor’s or equivalent level		
<b>COURSE CODE</b>		<b>SEMESTER</b>	9
<b>COURSE TITLE</b>	CARDIOLOGY		
<b>TEACHING ACTIVITIES</b> If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.	<b>TEACHING HOURS PER WEEK</b>		<b>ECTS CREDITS</b>
	6		5.0
<b>COURSE TYPE</b> Background, General Knowledge, Scientific Area, Skill Development	Background, General Knowledge, Scientific Area, Skill Development		
<b>PREREQUISITES</b>	No		
<b>TEACHING &amp; EXAMINATION LANGUAGE:</b>	Greek		
<b>COURSE OFFERED TO ERASMUS STUDENTS:</b>			
<b>COURSE URL:</b>			

### 2 LEARNING OUTCOMES

<p><b>Learning Outcomes</b> Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</p>
<p>The educational objectives of the course include:</p> <ul style="list-style-type: none"> <li>- Understanding both the physiology of the Cardiovascular system and the pathophysiology of related diseases</li> <li>- The knowledge of the nosology of the most frequent and important diseases that concern the field of Cardiology today</li> <li>- Teaching the diagnostic and therapeutic approach to Cardiovascular diseases as well as training in risk staging and decision-making in Cardiology</li> <li>- Practical training in clinical examination, laboratory investigation (chest x-ray, electrocardiogram, biochemical -cardiological- blood tests, echocardiogram, cardiac catheterization, percutaneous coronary interventions, implantation of pacemakers and defibrillators, structural heart disease interventions) and in dealing with cardiac emergencies</li> <li>- Introduction to Cardiovascular research</li> </ul>

Upon successful completion of the course, the student will be able to:

To clinically and laboratory diagnose the clinical syndromes and nosological entities with which Cardiac Diseases manifest

To interpret the Electrocardiogram, CXR

To know the basic principles of Echocardiography and Cardiac Catheterization as well as the whole spectrum of cardiovascular interventional procedures

To make a differential diagnosis concerning diseases that manifest as angina, dyspnea, edema, cyanosis, fatigue and syncope

To recognize the presence of signs of cardiovascular pathology in patients with systemic diseases or diseases involving non-cardiovascular systems

To know the treatment / management of acute heart emergencies

To know the treatment / management of all cardiovascular pathology

To acquire clinical skills related to Basic and Advanced Cardiovascular Resuscitation (BLS / ACLS)

They apply scientific principles, methods and knowledge to Medical Research and translation of Medical Literature

### **General Skills**

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information, ICT Use, Adaptation to new situations, Decision making, Autonomous work, Teamwork, Working in an international environment, Working in an interdisciplinary environment, Production of new research ideas

Project design and management Equity and Inclusion, Respect for the natural environment, Sustainability, Demonstration of social, professional and moral responsibility and sensitivity to gender issues, Critical thinking, Promoting free, creative and inductive reasoning

Adaptation to new situations

Decision making

Working in an interdisciplinary environment

Critical thinking

Promoting free, creative and inductive reasoning

Examining a patient

Evaluate clinical cases, order laboratory tests, make differential diagnoses, and negotiate a management plan

Communicate effectively in a medical environment

Apply scientific principles, methods and knowledge to medical practice and research

## **3 COURSE CONTENT**

### **Theory:**

1. Examination of the Cardiovascular System

2. General Anatomy / Physiology of the Cardiovascular System

3. Arterial Hypertension

4. Chronic Coronary Syndromes

5. Aortic valve stenosis

6. Aortic valve insufficiency

7. Mitral valve diseases (stenosis / insufficiency / prolapse)

8. Acute Heart Failure

9. Congenital Heart Diseases

10. Heart & Pregnancy

11. Pulmonary Embolism

12. Coronary Heart Disease (Pathophysiology – Chronic Coronary Heart Disease – Risk Factors)

13. Pulmonary Hypertension
14. Pericardial diseases
15. Syncope
16. Acute Coronary Syndromes
17. Bradyarrhythmias – Cardiac Pacing
18. Myocarditis
19. Tachyarrhythmias (Supraventricular)
20. Tachyarrhythmias (Ventricular)
21. Atrial fibrillation
22. Chronic Heart Failure
23. Cardiac arrest – Cardiopulmonary resuscitation
24. Endocarditis
25. Myocardiopathies (Hypertrophic – Dilated – Restrictive)
26. Diseases of the aorta

**Workshops or tutorials:**

1. Differential diagnosis of chest pain
2. Differential diagnosis of Dyspnea - Edema - fatigue
3. Differential diagnosis of Cyanosis
4. Differential diagnosis of Syncope
5. Clinical cases of Acute Coronary Syndromes – Stable Angina
6. Clinical cases of Acute and Chronic Heart Failure
7. Clinical cases of Atrial Fibrillation - Tachyarrhythmias (supraventricular and ventricular)
8. Clinical cases of Myocardiopathies - Myocarditis
9. Clinical cases of Pericardial Diseases
10. Clinical cases of Aortic Diseases
11. Clinical cases of Arterial Hypertension
12. Clinical cases of Pulmonary Embolism – Pulmonary Hypertension
13. Clinical cases of Valvular diseases
14. Clinical cases of Endocarditis
15. Clinical cases of bradyarrhythmias – Cardiac Pacing
16. Cardiopulmonary resuscitation

**Clinical exercise:**

History taking, physical examination, differential diagnosis of patients hospitalized in the Cardiology Department, Coronary Unit or Cardiac Catheterization Laboratory, interpretation of chest X-ray, Electrocardiogram, Treadmill Test, Cardiac Nuclear Scintigraphy, Echocardiogram (trans-thoracic and trans-esophageal) , Cardiac Pacing and Cardiac Catheterization & Intervention

**4 LEARNING&TEACHINGMETHODS-EVALUATION**

<p><b>TEACHING METHOD</b> Face to face, Distance learning, etc.</p>	<p>Face to face Distance learning (if needed)</p>
<p><b>USE OF INFORMATION&amp;COMMUNICATION TECHNOLOGY(ICT)</b> Use of ICT in Teaching, in Laboratory Education, in Communication with students</p>	<p>Use of ICT in Teaching Use of ICT in Communication with students</p>

**TEACHING ORGANIZATION**

The way and methods of teaching are described in detail.

Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study/creation, project, creation, project. Etc.

The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards

Activity	Workload/semester
Lectures	46
Tutoring / Workshops	32
Clinical Exercise	10
Study and Discussion of lecture notes	5
Bibliographic Textbook study & analysis	46
Study of research papers	10
<b>Total</b>	<b>149</b>

**STUDENT EVALUATION**

Description of the evaluation process

Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay/Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others

Please indicate all relevant information about the course assessment and how students are informed

**Student evaluation languages**

Greek

**Method (Formative or Concluding)**

Concluding

Student evaluation methods	Percent
Written exam with multiple choice test	100

**5 Suggested Bibliography**

The ESC Textbook of Cardiovascular Medicine (3 edn),  
 John Camm (ed.), Thomas F. Lüscher (ed.), Gerald Maurer (ed.), Patrick W. Serruys (ed.)  
 Online ISBN: 9780191827143, Print ISBN: 9780198784906  
 Publisher: Oxford University Press

## COURSE OUTLINE

### 1 GENERAL

<b>SCHOOL</b>	SCHOOL OF HEALTH SCIENCES		
<b>DEPARTMENT</b>	DEPARTMENT OF MEDICINE		
<b>LEVEL OF STUDIES</b>	ISCED level 6 – Bachelor’s or equivalent level		
<b>COURSE CODE</b>		<b>SEMESTER</b>	9
<b>COURSE TITLE</b>	OPHTHALMOLOGY		
<b>TEACHING ACTIVITIES</b> If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labsetc. If the ECTS Credits are awarded to the whole course, then please indicate theteaching hours per week and the corresponding ECTS Credits.		<b>TEACHING HOURS PERWEEK</b>	<b>ECTS CREDITS</b>
		3	3.0
<b>COURSE TYPE</b> Background, General Knowledge, Scientific Area, Skill Development	Scientific Area		
<b>PREREQUISITES</b>	No		
<b>TEACHING &amp; EXAMINATION LANGUAGE:</b>	Greek		
<b>COURSE OFFERED TO ERASMUSSTUDENTS:</b>			
<b>COURSE URL:</b>			

### 2 LEARNING OUTCOMES

<p><b>Learning Outcomes</b> Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</p> <p>Upon successful completion of the course, the student will have acquired the following knowledge, skills, and abilities:</p> <p>Knowledge:</p> <ol style="list-style-type: none"> <li>a) Basic ophthalmic knowledge requiring the understanding of anatomy and physiology of the globe, adnexal structures, optic nerve, and visual pathway. Pathophysiological mechanisms/risk factors.</li> <li>b) Basic knowledge of refractive errors.</li> <li>c) Understanding of pathophysiological mechanisms, impact, and knowledge of risk factors of common ophthalmic diseases; among them: ocular surface diseases, cataract, strabismus, uveitis, glaucoma, diabetic retinopathy, age-related macular degeneration, retinal detachment, and optic nerve diseases.</li> <li>d) Multifactorial approach to diseases (genetic predisposition, risk factors, environment, associated systemic diseases).</li> <li>e) Relevance of ophthalmic diseases to adjacent anatomical structures.</li> <li>f) Analysis/interpretation of diagnostic and therapeutic protocols.</li> </ol> <p>Skills:</p> <ol style="list-style-type: none"> <li>a) Patient examination in a primary care environment (problem-based).</li> </ol>
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- b) Evaluation of clinical cases, differential diagnosis, negotiation of management plan in common ophthalmic diseases.
- c) Execution of basic ophthalmic skills.
- d) Communication in a medical setting, examples of management and referral of ophthalmological patients.
- e) Application of scientific principles, methods, and knowledge in ophthalmological medical practice and research. Examples of the impact of evidence-based medicine on clinical ophthalmological practice.
- f) Development of (ophthalmological) surgical skills.
- g) Development of research skills in ophthalmology.

**Abilities:**

- a) Ophthalmoscopy – Fundoscopy.
- b) Acquisition – evaluation of ophthalmological history.
- c) Primary management of ophthalmological cases.
- d) Management of red eye in primary care – problem-based – simulated patient.
- e) Ophthalmological emergencies – problem-based.
- f) Understanding the etiology and distribution of common visual field defects – problem-based.

**General Skills**

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information, ICT Use, Adaptation to new situations, Decision making, Autonomous work, Teamwork, Working in an international environment, Working in an interdisciplinary environment, Production of new research ideas  
 Project design and management Equity and Inclusion, Respect for the natural environment, Sustainability, Demonstration of social, professional and moral responsibility and sensitivity to gender issues, Critical thinking, Promoting free, creative and inductive reasoning

- Search, analyze, and synthesize data and information, utilizing necessary technologies
- Collaborate in teamwork
- Adaptation to new situations
- Decision making
- Working in an interdisciplinary environment
- Equity and Inclusion
- Demonstration of social, professional and moral responsibility and sensitivity to gender issues
- Critical thinking
- Promoting free, creative and inductive reasoning
- Examining a patient
- Evaluate clinical cases, order laboratory tests, make differential diagnoses, and negotiate a management plan
- Communicate effectively in a medical environment
- Apply scientific principles, methods and knowledge to medical practice and research

**3 COURSE CONTENT**

**A) Classroom Sessions:**

1. Introduction to Ophthalmology. Educational objectives. Basic Ophthalmological examination
2. Anatomy, physiology, and diseases of the eyelids and lacrimal system
3. Anatomy, physiology, and diseases of the cornea and sclera
4. Clinical optics. Refractive disorders. Refractive surgery
5. Anatomy, physiology, and diseases of the iris and crystalline lens
6. Glaucoma
7. Anatomy, physiology, and diseases of the retina
8. Anatomy, physiology, and diseases of the ciliary body
9. Ocular tumors
10. Anatomy and diseases of the orbit
11. Strabismus.

12. Neuro-ophthalmology
13. Pediatric ophthalmology issues
14. Diseases of the optic nerve. Approach and management
15. Emergency cases. Approach and management
16. Clinical decision making - Clinical cases

B) Multimedia Usage

C) Analytical Discussion

D) Clinical Practice:

1. Ocular inspection
2. Slit-lamp biomicroscopy
3. Direct ophthalmoscopy
4. Visual acuity examination / Basic Refraction
5. Color vision examination
6. Oculomotor examination
7. Visual field examination
8. Red eye examination
9. Dilated eye examination
10. Cataract examination
11. Painful eye examination
12. Optical Coherence Tomography examination

E) Observation of Surgeries

F) Optional participation in research activities

G) Individual work

H) Group work

I) Home study

#### 4 LEARNING & TEACHING METHODS - EVALUATION

<b>TEACHING METHOD</b> Face to face, Distance learning, etc.	Face to face											
<b>USE OF INFORMATION &amp; COMMUNICATIONS TECHNOLOGY (ICT)</b> Use of ICT in Teaching, in Laboratory Education, in Communication with students	Use of ICT in Teaching Use of ICT in Laboratory Education Use of ICT in Communication with Students											
<b>TEACHING ORGANIZATION</b> The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study/creation, project, creation, project. Etc.  The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards	<table border="1"> <thead> <tr> <th data-bbox="799 1655 1174 1731">Activity</th> <th data-bbox="1174 1655 1458 1731">Workload/semester</th> </tr> </thead> <tbody> <tr> <td data-bbox="799 1731 1174 1807">Lectures</td> <td data-bbox="1174 1731 1458 1807">26</td> </tr> <tr> <td data-bbox="799 1807 1174 1883">Clinical Exercise</td> <td data-bbox="1174 1807 1458 1883">13</td> </tr> <tr> <td data-bbox="799 1883 1174 1960">Bibliographic research &amp; analysis</td> <td data-bbox="1174 1883 1458 1960">40</td> </tr> <tr> <td data-bbox="799 1960 1174 2040"><b>Total</b></td> <td data-bbox="1174 1960 1458 2040"><b>79</b></td> </tr> </tbody> </table>		Activity	Workload/semester	Lectures	26	Clinical Exercise	13	Bibliographic research & analysis	40	<b>Total</b>	<b>79</b>
Activity	Workload/semester											
Lectures	26											
Clinical Exercise	13											
Bibliographic research & analysis	40											
<b>Total</b>	<b>79</b>											

<b>STUDENT EVALUATION</b> Description of the evaluation process	<b>Student evaluation languages</b> Greek				
<p>Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay/Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others</p> <p>Please indicate all relevant information about the course assessment and how students are informed</p>	<b>Method (Formative or Concluding)</b> Formative				
	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th style="background-color: #e0e0e0;">Student evaluation methods</th> <th style="background-color: #e0e0e0;">Percent</th> </tr> </thead> <tbody> <tr> <td>Written exam with multiple choice test</td> <td>100</td> </tr> </tbody> </table>	Student evaluation methods	Percent	Written exam with multiple choice test	100
Student evaluation methods	Percent				
Written exam with multiple choice test	100				

## 5 Suggested Bibliography

Mark Batterbury, Ophthalmology an Illustrated Colour Text, 4th Edition, 2018, Language: English, ISBN: 9780702075025

Additional material:

- Lecture slides
- Educational videos

## COURSE OUTLINE

### 1 GENERAL

<b>SCHOOL</b>	SCHOOL OF HEALTH SCIENCES		
<b>DEPARTMENT</b>	DEPARTMENT OF MEDICINE		
<b>LEVEL OF STUDIES</b>	ISCED level 6 – Bachelor’s or equivalent level		
<b>COURSE CODE</b>		<b>SEMESTER</b>	9
<b>COURSE TITLE</b>	GYNECOLOGY		
<b>TEACHING ACTIVITIES</b> If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labsetc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.	<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>	
	4	4.0	

<b>COURSE TYPE</b> Background, General Knowledge, Scientific Area, Skill Development	Background, General Knowledge, Scientific Area
<b>PREREQUISITES</b>	No
<b>TEACHING &amp; EXAMINATION LANGUAGE:</b>	Greek
<b>COURSE OFFERED TO ERASMUS STUDENTS:</b>	
<b>COURSE URL:</b>	

## 2 LEARNING OUTCOMES

### Learning Outcomes

Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.

Upon successful completion of the course, the student will be able to:

- To clinically and laboratory diagnose the clinical syndromes with which the main gynecological diseases manifest
- To make a differential diagnosis between Acute and Chronic Damage of the gynecological organs

To recognize the presence of signs of gynecological damage in patients with systemic diseases or diseases involving systems other than gynecological organs

To know the treatment of acute complications of gynecological diseases

- To know how patients with acute or chronic damage are treated

### General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information, ICT Use, Adaptation to new situations, Decision making, Autonomous work, Teamwork, Working in an international environment, Working in an interdisciplinary environment, Production of new research ideas

Project design and management Equity and Inclusion, Respect for the natural environment, Sustainability, Demonstration of social, professional and moral responsibility and sensitivity to gender issues, Critical thinking, Promoting free, creative and inductive reasoning

Search, analysis and synthesis of data and information

Adaptation to new situations

Decision making

Working in an interdisciplinary environment

Equity and Inclusion

Demonstration of social, professional and moral responsibility and sensitivity to gender issues

Critical thinking

Promoting free, creative and inductive reasoning

Examining a patient

Evaluate clinical cases, order laboratory tests, make differential diagnoses, and negotiate a management plan

Communicate effectively in a medical environment

Apply scientific principles, methods and knowledge to medical practice and research

### 3 COURSE CONTENT

Theoretical:

1. Anatomy of the female reproductive system
2. Physiology of the female reproductive system
3. Gynecological Examination-Diagnostic methods Congenital and topographic abnormalities of the uterus
4. Polycystic ovary syndrome Ovarian cancer
5. Evidence of child adolescent Gynecology
6. Climax-Menopause
8. Contraception
9. Breast diseases Breast cancer
10. Sterilization Assisted reproduction
11. Neoplasms of the uterus Diseases of the body of the uterus (except cancer)
12. Diseases of the cervix
13. Adenomyosis – Endometriosis – Uterine inflammations

Tutorials

1. Pelvic inflammation-Appendicitis-
2. Ectopic Pregnancy-Disorders of corpus luteum function
2. Ovarian diseases other than cancer
3. Sexually transmitted diseases
4. Pregnancy bleeding
5. Clinical syndromes of gynecological diseases
6. Specific clinical cases with a rare frequency of occurrence
7. Clinical cases of systemic diseases involving internal genital organs
8. Abortions

Clinical exercise: History taking, physical examination, ultrasound examination, differential diagnosis of diseases of women hospitalized at the University Obstetrics and Gynecology Clinic

Clinical practice: History taking, physical examination, ultrasound examination, differential diagnosis of diseases of women who come to the outpatient clinics at the University Obstetrics and Gynecology Clinic

### 4 LEARNING & TEACHING METHODS - EVALUATION

<b>TEACHING METHOD</b> Face to face, Distance learning, etc.	Face to face.											
<b>USE OF INFORMATION &amp; COMMUNICATIONS TECHNOLOGY (ICT)</b> Use of ICT in Teaching, in Laboratory Education, in Communication with students	Use of ICT in Teaching Use of ICT in Laboratory Education Use of ICT in Communication with students											
<b>TEACHING ORGANIZATION</b> The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study/creation, project, creation, project. Etc.  The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards	<table border="1"> <thead> <tr> <th style="background-color: #f2f2f2;">Activity</th> <th style="background-color: #f2f2f2;">Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>26</td> </tr> <tr> <td>Clinical Exercise</td> <td>26</td> </tr> <tr> <td>Bibliographic research &amp; analysis</td> <td>48</td> </tr> <tr> <td><b>Total</b></td> <td><b>100</b></td> </tr> </tbody> </table>		Activity	Workload/semester	Lectures	26	Clinical Exercise	26	Bibliographic research & analysis	48	<b>Total</b>	<b>100</b>
Activity	Workload/semester											
Lectures	26											
Clinical Exercise	26											
Bibliographic research & analysis	48											
<b>Total</b>	<b>100</b>											
<b>STUDENT EVALUATION</b> Description of the evaluation process	<b>Student evaluation languages</b> Greek											

Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay/Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others

Please indicate all relevant information about the course assessment and how students are informed

**Method (Formative or Concluding)**

Formative

Student evaluation methods	Percent
Written exam with multiple choice test	100

**5 Suggested Bibliography**

**1. ΚΛΙΝΙΚΗ ΜΑΙΕΥΤΙΚΗ & ΓΥΝΑΙΚΟΛΟΓΙΑ**

Συγγραφείς : BRIAN A. MAGOWAN, PHILIP OWEN, ANDREW THOMSON Επιμέλεια ελληνικής έκδοσης Νικόλαος Νικολέττος

4η Ελληνική Έκδοση

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ΕΠΙΣΤΗΜΟΝΙΚΕΣ ΕΚΔΟΣΕΙΣ ΠΑΡΙΣΙΑΝΟΥ Α.Ε.

**2. ΜΑΙΕΥΤΙΚΗ ΚΑΙ ΓΥΝΑΙΚΟΛΟΓΙΑ**

Συγγραφείς: CHARLES R .B. BECKMANN, FRANK W.LING, WILLIAM N.P. HERBERT, DOUGLAS W.LAUBE, ROGER CASANOVA, ALICE CHUANG, ALICE CHUANG ,ALICE R. GOEPERT ,NANCY A. HUEPPCHEN, PATRICE M.WEISS

Επιμέλεια ελληνικής έκδοσης : Αλέξανδρος Ι. Δαπόντε

7η Αγγλική Έκδοση

1η Ελληνική έκδοση

COPYRIGHT 2018 ISBN 978-960-608-014-2

ΙΑΤΡΙΚΕΣ ΕΚΔΟΣΕΙΣ ΚΩΝΣΤΑΝΤΑΡΑΣ

**COURSE OUTLINE**

**1 GENERAL**

<b>SCHOOL</b>	SCHOOL OF HEALTH SCIENCES		
<b>DEPARTMENT</b>	DEPARTMENT OF MEDICINE		
<b>LEVEL OF STUDIES</b>	ISCED level 6 – Bachelor’s or equivalent level		
<b>COURSE CODE</b>		<b>SEMESTER</b>	9
<b>COURSE TITLE</b>	PSYCHIATRY		
<b>TEACHING ACTIVITIES</b> If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labsetc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.	<b>TEACHING HOURS PER WEEK</b>		<b>ECTS CREDITS</b>

	8	7.0
<b>COURSE TYPE</b> Background, General Knowledge, Scientific Area, Skill Development	Scientific Area	
<b>PREREQUISITES</b>	No	
<b>TEACHING &amp; EXAMINATION LANGUAGE:</b>	Greek	
<b>COURSE OFFERED TO ERASMUS STUDENTS:</b>		
<b>COURSE URL:</b>		

## 2 LEARNING OUTCOMES

<p><b>Learning Outcomes</b> Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</p>
<p>Upon successful completion of the course the student will be able to:</p> <ul style="list-style-type: none"> <li>• Know, recognize, and differentiate among the various signs and symptoms in Psychiatry</li> <li>• Know the clinical picture, etiology, epidemiology, diagnosis, differential diagnosis, and treatment of the main psychiatric disorders in both adults and children &amp; adolescents.</li> <li>• Know the main indications, contraindications, interactions, and side effects of biological therapies used in Psychiatry</li> <li>• Be aware of the main psychological theories and their application in psychiatric therapy</li> <li>• Be aware of the meaning of the interplay of biological, psychological, and social factors in the etiology, course and prognosis of psychiatric disorders</li> <li>• Perform clinical psychiatric examination</li> <li>• Take and write down a psychiatric medical history</li> <li>• Make hypotheses about the etiopathology, the onset and the relapse of a patient's psychiatric disorder</li> <li>• Perform psychiatric diagnosis and differential diagnosis</li> <li>• Know the main psychiatric both hospital and community services along with the purpose of their function within the network of mental health services of a catchment area health service network of a given area of responsibility.</li> </ul>

<p><b>General Skills</b></p> <p>Name the desirable general skills upon successful completion of the module</p> <p>Search, analysis and synthesis of data and information, ICT Use, Adaptation to new situations, Decision making, Autonomous work, Teamwork, Working in an international environment, Working in an interdisciplinary environment, Production of new research ideas</p> <p>Project design and management Equity and Inclusion, Respect for the natural environment, Sustainability, Demonstration of social, professional and moral responsibility and sensitivity to gender issues, Critical thinking, Promoting free, creative and inductive reasoning</p> <p>Adaptation to new situations Working in an interdisciplinary environment Working in an international environment Decision making Equity and Inclusion Demonstration of social, professional and moral responsibility and sensitivity to gender issues Critical thinking</p>
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Promoting free, creative and inductive reasoning  
 Search, analysis and synthesis of data and information  
 Communicate effectively in a medical environment  
 Evaluate clinical cases, order laboratory tests, make differential diagnoses, and negotiate a management plan  
 Apply scientific principles, methods and knowledge to medical practice and research

### 3 COURSE CONTENT

- A) Lectures (theoretical courses)
1. History of psychiatry
  2. Signs and Symptoms of Psychiatric Disorders I
  3. Signs and Symptoms of Psychiatric Disorders II
  4. Schizophrenia and Related Disorders I
  5. Schizophrenia and Related Disorders II
  6. Schizophrenia and Related Disorders III
  7. Anxiety Disorders I
  8. Somatoform and dissociative disorders
  9. Mood disorders I
  10. Mood disorders II
  11. Organic Mental Disorders
  12. Personality disorders
  13. Substance Use Disorders
  14. Eating Disorders
  15. Child and Adolescent Psychiatry I
  16. Child and Adolescent Psychiatry II
  17. Child and Adolescent Psychiatry III
  18. Psychiatric Emergencies I
  19. Psychiatric Emergencies II
  20. Biological therapies I
  21. Biological therapies II
  22. Biological therapies III
  23. Psychological Theories
  24. Psychological Therapies
  25. Revision
  26. Revision

B) Clinical Exercise and Tutoring.

Their goal is to facilitate understanding the theory and applying it into practice along with familiarizing with psychiatric history taking and performing psychiatric clinical examination.

Students are divided into groups.

During the clinical placement, students participate closely in the process of psychiatric clinical examination and psychiatric history taking of a patient which are performed in front of them by their tutor, with the agreement of the patient. Afterwards, they discuss about psychiatric signs and symptoms, diagnosis, differential diagnosis, and treatment related to the examined patient.

During the tutorial courses, the students, in the presence of their tutor, attend in video model psychiatric interviews about frequent and/or severe psychiatric disorders. Subsequently, students participate in an organized discussion led by the tutor, regarding psychiatric signs and symptoms, diagnosis, differential diagnosis, and the treatment concerning the model case they attended.

### 4 LEARNING & TEACHING METHODS - EVALUATION

<b>TEACHING METHOD</b> Face to face, Distance learning, etc.	Face to face
-----------------------------------------------------------------	--------------

<p><b>USE OF INFORMATION &amp; COMMUNICATIONS TECHNOLOGY (ICT)</b> Use of ICT in Teaching, in Laboratory Education, in Communication with students</p>	<p>Use of ICT in Teaching Use of ICT in Communication with students</p>												
<p><b>TEACHING ORGANIZATION</b> The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research &amp; analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study/creation, project, creation, project. Etc.</p> <p>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards</p>	<table border="1"> <thead> <tr> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>52</td> </tr> <tr> <td>Tutoring</td> <td>26</td> </tr> <tr> <td>Clinical Exercise</td> <td>26</td> </tr> <tr> <td>Unsupervised workload (Studying, Bibliographic research &amp; analysis)</td> <td>106</td> </tr> <tr> <td><b>Total</b></td> <td><b>210</b></td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	52	Tutoring	26	Clinical Exercise	26	Unsupervised workload (Studying, Bibliographic research & analysis)	106	<b>Total</b>	<b>210</b>
Activity	Workload/semester												
Lectures	52												
Tutoring	26												
Clinical Exercise	26												
Unsupervised workload (Studying, Bibliographic research & analysis)	106												
<b>Total</b>	<b>210</b>												

<p><b>STUDENT EVALUATION</b> Description of the evaluation process</p> <p>Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay/Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others</p> <p>Please indicate all relevant information about the course assessment and how students are informed</p>	<p><b>Student evaluation languages</b> Greek</p> <p><b>Method (Formative or Concluding)</b> Formative</p> <table border="1"> <thead> <tr> <th>Student evaluation methods</th> <th>Percent</th> </tr> </thead> <tbody> <tr> <td>Written exam with multiple choice test</td> <td>50</td> </tr> <tr> <td>Written exam with short answer questions</td> <td>50</td> </tr> </tbody> </table>	Student evaluation methods	Percent	Written exam with multiple choice test	50	Written exam with short answer questions	50
Student evaluation methods	Percent						
Written exam with multiple choice test	50						
Written exam with short answer questions	50						

## 5 Suggested Bibliography

Harrison Paul, Cowen Philip, Burns Tom, Fazel Mina. Shorter Oxford Textbook of Psychiatry Seventh Edition. OXFORD UNIVERSITY PRESS, Published: 12 October 2017  
Boland, R., Verdiun, M., & Ruiz, P. (2021). Kaplan & Sadock's synopsis of psychiatry. Lippincott Williams & Wilkins.

## COURSE OUTLINE

### 1 GENERAL

<b>SCHOOL</b>	SCHOOL OF HEALTH SCIENCES		
<b>DEPARTMENT</b>	DEPARTMENT OF MEDICINE		
<b>LEVEL OF STUDIES</b>	ISCED level 6 – Bachelor’s or equivalent level		
<b>COURSE CODE</b>		<b>SEMESTER</b>	9
<b>COURSE TITLE</b>	CARDIOTHORACIC SURGERY		
<b>TEACHING ACTIVITIES</b> If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labsetc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.		<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>
		3	3.0
<b>COURSE TYPE</b> Background, General Knowledge, Scientific Area, Skill Development	Background, Scientific Area		
<b>PREREQUISITES</b>	No		
<b>TEACHING &amp; EXAMINATION LANGUAGE:</b>	Greek		
<b>COURSE OFFERED TO ERASMUS STUDENTS:</b>			
<b>COURSE URL:</b>			

### 2 LEARNING OUTCOMES

<p><b>Learning Outcomes</b> Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</p>
<p>Upon successful completion of the course, the student will be able to:</p> <ul style="list-style-type: none"> <li>- To establish the diagnosis and be able to understand the correct treatment of diseases that require cardiothoracic care.</li> <li>- to set the differential diagnosis and treatment with other cardiovascular diseases and syndromes</li> <li>- to apply disease prevention methods.</li> <li>- He will be able to fully comprehend and apply basic steps of cardiac surgery technique and be able to diagnose basic surgical complications</li> </ul>

<p><b>General Skills</b></p> <p>Name the desirable general skills upon successful completion of the module</p> <p>Search, analysis and synthesis of data and information, ICT Use, Adaptation to new situations, Decision making, Autonomous work, Teamwork, Working in an international environment, Working in an interdisciplinary environment,</p>
--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Production of new research ideas

Project design and management Equity and Inclusion, Respect for the natural environment, Sustainability, Demonstration of social, professional and moral responsibility and sensitivity to gender issues, Critical thinking, Promoting free, creative and inductive reasoning

Search, analysis and synthesis of data and information

ICT Use

Adaptation to new situations

Decision making

Working in an interdisciplinary environment

Equity and Inclusion

Demonstration of social, professional and moral responsibility and sensitivity to gender issues

Critical thinking

Promoting free, creative and inductive reasoning

Examining a patient

Evaluate clinical cases, order laboratory tests, make differential diagnoses, and negotiate a management plan

Communicate effectively in a medical environment

Apply scientific principles, methods and knowledge to medical practice and research

### 3 COURSE CONTENT

1. Cardiac anatomy and physiology
2. Cardiopulmonary bypass
3. Myocardial protection
4. Aortic valve disease
5. Mitral valve disease
6. Tricuspid valve disease
7. Congenital cardiac surgery
8. Thoracic aortic disease
9. Infective endocarditis
10. Heart failure surgery and cardiac transplantation
11. Arrhythmia surgery
12. Pericardial disease, cardiac tumors and cardiac trauma
13. Postoperative management

### 4 LEARNING & TEACHING METHODS - EVALUATION

<b>TEACHING METHOD</b> Face to face, Distance learning, etc.	Face to face
<b>USE OF INFORMATION &amp; COMMUNICATIONS TECHNOLOGY (ICT)</b> Use of ICT in Teaching, in Laboratory Education, in Communication with students	Use of ICT in Teaching Use of ICT in Laboratory Education Use of ICT in Communication with students

**TEACHING ORGANIZATION**

The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study/creation, project, creation, project. Etc.

The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards

Activity	Workload/semester
Lectures	18
Clinical Exercise	21
Bibliographic research & analysis	51
<b>Total</b>	<b>90</b>

**STUDENT EVALUATION**

Description of the evaluation process

Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay/Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others

Please indicate all relevant information about the course assessment and how students are informed

**Student evaluation languages**

Greek

**Method (Formative or Concluding)**

Formative

Student evaluation methods	Percent
Essay	100

**5 Suggested Bibliography**

Key questions in cardiac surgery (Narain Moorjani, nikola viola)  
 Journal of thoracic cardiovascular surgery  
 -European journal of cardiothoracic surgery  
 -Annals of thoracic surgery

## COURSE OUTLINE

### 1 GENERAL

<b>SCHOOL</b>	SCHOOL OF HEALTH SCIENCES		
<b>DEPARTMENT</b>	DEPARTMENT OF MEDICINE		
<b>LEVEL OF STUDIES</b>	ISCED level 6 – Bachelor’s or equivalent level		
<b>COURSE CODE</b>		<b>SEMESTER</b>	10
<b>COURSE TITLE</b>	PEDIATRICS		
<b>TEACHING ACTIVITIES</b> If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labsetc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.		<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>
		6	6.0
<b>COURSE TYPE</b> Background, General Knowledge, Scientific Area, Skill Development	General Knowledge		
<b>PREREQUISITES</b>	No		
<b>TEACHING &amp; EXAMINATION LANGUAGE:</b>	Greek		
<b>COURSE OFFERED TO ERASMUS STUDENTS:</b>			
<b>COURSE URL:</b>			

### 2 LEARNING OUTCOMES

<p><b>Learning Outcomes</b> Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</p>
<p>The course in Pediatrics aims to familiarize the student with the sick child and his needs. The purpose of the course is for students to acquire the following knowledge and skills:</p> <ol style="list-style-type: none"> <li>1. Detailed pediatric history-taking.</li> <li>2. Clinical examination of the newborn, infant, and toddler.</li> <li>3. Infant-toddler psychomotor development.</li> <li>4. Proper nutrition of the infant.</li> <li>5. Assessment of infant-child physical development (weight, length-height, head circumference curves).</li> <li>6. Understanding the Greek National Immunization Program for Children and Adolescents.</li> <li>7. Use of Antibiotics, Antivirals, and Antifungals in Common Pediatric Infections.</li> <li>8. Clinical examination by systems.</li> <li>9. Understanding the most common pediatric medical problems by system.</li> </ol>

<b>General Skills</b>
-----------------------

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information, ICT Use, Adaptation to new situations, Decision making, Autonomous work, Teamwork, Working in an international environment, Working in an interdisciplinary environment, Production of new research ideas  
Project design and management Equity and Inclusion, Respect for the natural environment, Sustainability, Demonstration of social, professional and moral responsibility and sensitivity to gender issues, Critical thinking, Promoting free, creative and inductive reasoning

Search, analysis and synthesis of data and information,  
ICT Use  
Decision making  
Autonomous work  
Teamwork  
Working in an interdisciplinary environment Equity and Inclusion

### 3 COURSE CONTENT

The duration of training during the spring semester is 13 weeks, the training is completed by the end of May. The lectures every working Monday are 3 hours (10:00-13:00), while every working Friday there is a 2-hour clinical tutorial (15:00-17:00). All Monday lectures take place in the Amphitheater of the University General Hospital of Alexandroupolis (PGNA). In contrast, all clinical tutorials are held in the large training hall of Benedict Adamantiadis, located on the 1st floor of the PGNA.

### 4 LEARNING & TEACHING METHODS - EVALUATION

<b>TEACHING METHOD</b> Face to face, Distance learning, etc.	Face to face						
<b>USE OF INFORMATION &amp; COMMUNICATIONS TECHNOLOGY (ICT)</b> Use of ICT in Teaching, in Laboratory Education, in Communication with students	Use of ICT in Teaching Use of ICT in Laboratory Education Use of ICT in Communication with students						
<b>TEACHING ORGANIZATION</b> The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study/creation, project, creation, project. Etc. The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards	<table border="1" data-bbox="831 1554 1406 1722"> <thead> <tr> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>180</td> </tr> <tr> <td><b>Total</b></td> <td><b>180</b></td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	180	<b>Total</b>	<b>180</b>
Activity	Workload/semester						
Lectures	180						
<b>Total</b>	<b>180</b>						
<b>STUDENT EVALUATION</b> Description of the evaluation process	<b>Student evaluation languages</b> Greek						

Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay/Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others

Please indicate all relevant information about the course assessment and how students are informed

#### Method (Formative or Concluding)

Formative

Student evaluation methods	Percent
Written exam with multiple choice test	75
Written exam with short answer questions	25

## 5 Suggested Bibliography

1. Σύγχρονη Παιδιατρική, 4η έκδοση, Έκδοση: 4η έκδ./2016 Συγγραφείς: Lissauer Tom, Clayden Graham, ISBN: 9789963258376

Εκδότης: BROKEN HILL PUBLISHERS LTD

2. Nelson Βασική Παιδιατρική 5η έκδοση, Έκδοση: 5/2020 Συγγραφείς: Marc dante J. Karen, Kliegman M. Robert, ISBN: 9789925575992

Εκδότης: BROKEN HILL PUBLISHERS LTD

3. Βασική Παιδιατρική, 4η έκδοση,

Έκδοση: 4η έκδ./2023, Συγγραφείς: Κανακούδη-Τσακαλίδου Φλωρεντία, Παπαχρήστου Φώτιος, Δρόσου-Αγακίδου Βασιλική, Ζαφειρίου Δημήτριος, ISBN: 9789601225784 Εκδότης: University Studio Press

## COURSE OUTLINE

### 1 GENERAL

<b>SCHOOL</b>	SCHOOL OF HEALTH SCIENCES		
<b>DEPARTMENT</b>	DEPARTMENT OF MEDICINE		
<b>LEVEL OF STUDIES</b>	ISCED level 6 – Bachelor's or equivalent level		
<b>COURSE CODE</b>		<b>SEMESTER</b>	10
<b>COURSE TITLE</b>	OBSTETRICS		
<b>TEACHING ACTIVITIES</b> If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labsetc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.	<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>	
	4	4.0	

<b>COURSE TYPE</b> Background, General Knowledge, Scientific Area, Skill Development	Background, General Knowledge, Scientific Area
<b>PREREQUISITES</b>	No
<b>TEACHING &amp; EXAMINATION LANGUAGE:</b>	Greek
<b>COURSE OFFERED TO ERASMUS STUDENTS:</b>	
<b>COURSE URL:</b>	

## 2 LEARNING OUTCOMES

### Learning Outcomes

Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.

The learning objectives of the course include:

Knowledge and experience in the pathophysiology, diagnosis and treatment of the main entities related to obstetrics.

Knowledge and experience in the diagnosis and treatment of conditions caused by insufficiency of placental function.

Knowledge and experience in the recognition and treatment of obstetric complications in the context of termination of labor

Upon successful completion of the course, the student will be able to:

– To clinically and laboratory diagnose the clinical syndromes with which the main gynecological diseases manifest during pregnancy

- To make a differential diagnosis between Acute and Chronic Damage of the gynecological organs during pregnancy

To recognize the presence of signs of gynecological damage in patients with systemic diseases or diseases involving systems other than gynecological organs during pregnancy

To know the treatment of acute complications of pregnancy pathology

### General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information, ICT Use, Adaptation to new situations, Decision making, Autonomous work, Teamwork, Working in an international environment, Working in an interdisciplinary environment, Production of new research ideas

Project design and management Equity and Inclusion, Respect for the natural environment, Sustainability, Demonstration of social, professional and moral responsibility and sensitivity to gender issues, Critical thinking, Promoting free, creative and inductive reasoning

Adaptation to new situations

Decision making

Autonomous work

Teamwork

Work in an international environment

Work in an interdisciplinary environment

Respect for diversity and multiculturalism

Demonstrating social, professional and ethical responsibility and gender sensitivity Exercise criticism and self-criticism

Promotion of free, creative and inductive thinking  
 They are examining a patient  
 They evaluate clinical cases, order laboratory tests, make differential diagnoses, and negotiate a management plan  
 Communicate effectively in a medical setting  
 They apply scientific principles, methods and knowledge to medical practice and research

### 3 COURSE CONTENT

Theoretical:

1. Physiology of Reproduction
2. Diagnosis of pregnancy
3. Obstetric Anatomy-Physiology
4. Physiology of the embryo-embryoplacental unit
5. Fertilization and development of the embryo
6. Prenatal control
7. Monitoring the pregnancy
8. Fetal monitoring
9. Normal childbirth
10. Pathology of childbirth Dystocias - Abnormal shapes and projections
11. Obstetric bleeding
12. Complications of the 1st, 2nd, 3rd trimester
13. Multiple pregnancy
14. High risk pregnancy Preeclampsia-Eclampsia
15. Gestational diabetes

Tutorials

1. Pregnancy hypertension
2. Premature labor
3. Pathological and surgical diseases in pregnancy
4. Mule pregnancy
5. Majors
6. Abortions
7. Pregnancy and infections
8. Pregnancy and medicines
9. Psychoprophylactic analgesia

Clinical exercise:

History taking, physical examination, follow-up of pregnant women seen in outpatient clinics at the University Obstetrics and Gynecology Clinic

History taking, physical examination, follow-up of pregnant women hospitalized at the University Obstetrics and Gynecology Clinic

History taking, physical examination, monitoring of rates hospitalized in the Department of Obstetrics and Gynecology of the University Obstetrics and Gynecology Clinic for the processing of deliveries

### 4 LEARNING & TEACHING METHODS - EVALUATION

<b>TEACHING METHOD</b> Face to face, Distance learning, etc.	Face to face
<b>USE OF INFORMATION &amp; COMMUNICATIONS TECHNOLOGY (ICT)</b> Use of ICT in Teaching, in Laboratory Education, in Communication with students	Use of ICT in Teaching Use of ICT in Laboratory Education Use of ICT in Communication with students

**TEACHING ORGANIZATION**

The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study/creation, project, creation, project. Etc.

The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards

Activity	Workload/semester
Lectures	26
Tutoring	
Clinical Exercise	26
Bibliographic research & analysis	48
<b>Total</b>	<b>100</b>

**STUDENT EVALUATION**

Description of the evaluation process

Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay/Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others

Please indicate all relevant information about the course assessment and how students are informed

**Student evaluation languages**

Greek

**Method (Formative or Concluding)**

Formative

Student evaluation methods	Percent
Written exam with multiple choice test	100

**5 Suggested Bibliography**

1. Williams Μαιευτική

ΜΑΙΕΥΤΙΚΗ

## COURSE OUTLINE

### 1 GENERAL

<b>SCHOOL</b>	SCHOOL OF HEALTH SCIENCES		
<b>DEPARTMENT</b>	DEPARTMENT OF MEDICINE		
<b>LEVEL OF STUDIES</b>	ISCED level 6 – Bachelor’s or equivalent level		
<b>COURSE CODE</b>		<b>SEMESTER</b>	10
<b>COURSE TITLE</b>	HAEMATOLOGY		
<b>TEACHING ACTIVITIES</b> If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labsetc. If the ECTS Credits are awarded to the whole course, then please indicate theteaching hours per week and the corresponding ECTS Credits.		<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>
		5	4.0
<b>COURSE TYPE</b> Background, General Knowledge, Scientific Area, Skill Development	Background		
<b>PREREQUISITES</b>	No		
<b>TEACHING &amp; EXAMINATION LANGUAGE:</b>	Greek		
<b>COURSE OFFERED TO ERASMUSSTUDENTS:</b>			
<b>COURSE URL:</b>			

### 2 LEARNING OUTCOMES

<p><b>Learning Outcomes</b> Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</p>
<p>The educational purpose of this course is to provide a comprehensive presentation of modern Hematology in all of the clinical, laboratory and research fields. Through this course the students will acquire the necessary knowledge of recognition, differential diagnosis therapeutic approach of hematological disorders.</p>

<p><b>General Skills</b> Name the desirable general skills upon successful completion of the module</p> <p>Search, analysis and synthesis of data and information, ICT Use, Adaptation to new situations, Decision making, Autonomous work, Teamwork, Working in an international environment, Working in an interdisciplinary environment, Production of new research ideas</p> <p>Project design and management Equity and Inclusion, Respect for the natural environment, Sustainability, Demonstration of social, professional and moral responsibility and sensitivity to gender issues, Critical thinking, Promoting free, creative</p>
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

and inductive reasoning

Search, analysis and synthesis of data and information,  
ICT Use  
Decision making  
Autonomous work  
Teamwork  
Working in an international environment

### 3 COURSE CONTENT

The course content is the following:

1. Medical history of hematological patients
2. CBC, blood smear, marrow aspirate
3. Peripheral blood cell subsets
4. Diagnostic approach of anemias
5. Differential diagnosis of anemias
6. Hematopoiesis
7. Iron deficiency and megaloblastic anemia
8. Thalassemias
9. Anemia of inflammation
10. Hemolytic anemias
11. Differential diagnosis of anemias II,
12. Diagnostic methods in Hematology
13. Aplastic anemia and MDS
14. The immunocompromised patient
15. Myeloproliferative neoplasms
16. Acute leukemias
17. Chronic leukemias
18. Basic principles of chemotherapy
19. Lymphopoiesis - investigation of leukopenia and leukocytosis
20. Chronic Leukemias II
21. Thrombocytopenia
22. Differential diagnosis of lymphadenopathy
23. Blood groups. Principles of transfusion
24. Lymphomas I,
25. Lymphomas II,
26. Investigation of coagulation disorders
27. Multiple myeloma and Waldenstrom's disease
28. Hereditary bleeding disorders
29. Differential diagnosis of cytopenias,
30. Stem cell transplantation
31. Diagnostic methods in Hematology.

### 4 LEARNING & TEACHING METHODS - EVALUATION

TEACHING METHOD	
Face to face, Distance learning, etc.	Face to face

<b>USE OF INFORMATION &amp; COMMUNICATIONS TECHNOLOGY (ICT)</b> Use of ICT in Teaching, in Laboratory Education, in Communication with students	Use of ICT in Communication with students												
<b>TEACHING ORGANIZATION</b> The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study/creation, project, creation, project. Etc.  The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards	<table border="1"> <thead> <tr> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>39</td> </tr> <tr> <td>Tutoring</td> <td>26</td> </tr> <tr> <td>Clinical Exercise</td> <td>2</td> </tr> <tr> <td>Bibliographic research &amp; analysis</td> <td>53</td> </tr> <tr> <td><b>Total</b></td> <td><b>120</b></td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	39	Tutoring	26	Clinical Exercise	2	Bibliographic research & analysis	53	<b>Total</b>	<b>120</b>
Activity	Workload/semester												
Lectures	39												
Tutoring	26												
Clinical Exercise	2												
Bibliographic research & analysis	53												
<b>Total</b>	<b>120</b>												

<b>STUDENT EVALUATION</b> Description of the evaluation process  Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay/Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others  Please indicate all relevant information about the course assessment and how students are informed	<b>Student evaluation languages</b> Greek  <b>Method (Formative or Concluding)</b> Formative  <table border="1"> <thead> <tr> <th>Student evaluation methods</th> <th>Percent</th> </tr> </thead> <tbody> <tr> <td>Written exam with multiple choice test</td> <td>50</td> </tr> <tr> <td>Oral exam</td> <td>50</td> </tr> </tbody> </table>	Student evaluation methods	Percent	Written exam with multiple choice test	50	Oral exam	50
Student evaluation methods	Percent						
Written exam with multiple choice test	50						
Oral exam	50						

## 5 Suggested Bibliography

1. «Αιματολογία» (συγγραφείς: Martin R Howard - Peter J Hamilton, επιμέλεια: Γεράσιμος Α Πάγκαλης), εκδόσεις: Παρισιάνου Α.Ε., έκδοση 3 η, 2014, Αθήνα. ISBN: 978 960 394 9619
2. «Βασική Αιματολογία» (συγγραφείς: A V Hoffbrand and amp. P A H Moss) εκδόσεις: Παρισιάνου Α.Ε, έκδοση 7 η, 2020, Αθήνα. ISBN: 978 960 583 4609
- 3) Επιστημονικά άρθρα στο pubmed

## COURSE OUTLINE

### 1 GENERAL

<b>SCHOOL</b>	SCHOOL OF HEALTH SCIENCES		
<b>DEPARTMENT</b>	DEPARTMENT OF MEDICINE		
<b>LEVEL OF STUDIES</b>	ISCED level 6 – Bachelor’s or equivalent level		
<b>COURSE CODE</b>		<b>SEMESTER</b>	10
<b>COURSE TITLE</b>	NEPHROLOGY		
<b>TEACHING ACTIVITIES</b> If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labsetc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.		<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>
		5	4.0
<b>COURSE TYPE</b> Background, General Knowledge, Scientific Area, Skill Development	Scientific Area		
<b>PREREQUISITES</b>	No		
<b>TEACHING &amp; EXAMINATION LANGUAGE:</b>	Greek		
<b>COURSE OFFERED TO ERASMUSSTUDENTS:</b>			
<b>COURSE URL:</b>			

### 2 LEARNING OUTCOMES

<p><b>Learning Outcomes</b> Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</p>
<p>After the successful completion of the course, students will be able to:</p> <ul style="list-style-type: none"> <li>- Diagnose clinically and laboratory the main clinical syndromes of Renal Diseases.</li> <li>- Clinically and laboratory diagnose the stages of chronic kidney diseases.</li> <li>- Make a differential diagnosis between Acute Kidney Injury and Chronic Kidney Disease.</li> <li>- Recognize the presence of signs of renal damage in patients with systemic diseases or diseases involving systems other than the kidney.</li> <li>- Know the management of acute complications of renal diseases.</li> <li>- Know how patients with acute or chronic damage are treated.</li> </ul>

<p><b>General Skills</b> Name the desirable general skills upon successful completion of the module</p>
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Search, analysis and synthesis of data and information, ICT Use, Adaptation to new situations, Decision making, Autonomous work, Teamwork, Working in an international environment, Working in an interdisciplinary environment, Production of new research ideas  
Project design and management Equity and Inclusion, Respect for the natural environment, Sustainability, Demonstration of social, professional and moral responsibility and sensitivity to gender issues, Critical thinking, Promoting free, creative and inductive reasoning

Search, analysis and synthesis of data and information  
ICT Use  
Adaptation to new situations  
Decision making  
Working in an interdisciplinary environment  
Critical thinking  
Promoting free, creative and inductive reasoning  
Examining a patient  
Evaluate clinical cases, order laboratory tests, make differential diagnoses, and negotiate a management plan  
Communicate effectively in a medical environment  
Apply scientific principles, methods and knowledge to medical practice and research

### 3 COURSE CONTENT

#### Lectures (theoretical courses)

1. Kidney physiology
2. Pathophysiology of renal diseases
3. Clinical approach to renal diseases
4. Acute kidney injury
5. Chronic kidney disease
6. Glomerulopathies
7. Interstitial kidney diseases
8. Metabolic diseases, diabetic kidney disease
9. Hereditary kidney diseases
10. Systemic diseases and kidney
11. Arterial Hypertension
12. Kidney and cardiovascular system, pregnancy, liver
13. Kidney transplantation

#### Tutorials

1. Clinical approach to renal diseases
2. Laboratory approach to renal diseases
3. Clinical cases of acute kidney injury
4. Clinical cases of chronic kidney disease
5. Methods of renal replacement therapy
6. Clinical syndromes of glomerulopathies
7. Clinical cases of interstitial Nephritis
8. Clinical cases of Diabetic Kidney Disease
9. Clinical cases of hypertensive patients
10. Clinical cases of nephropathies of systemic diseases
11. Clinical cases of hypertension in pregnancy
12. Clinical cases of kidney transplantation

#### Clinical practice

Medical history, physical examination, differential diagnosis in hospitalized patients in the Nephrology Ward, the Peritoneal Dialysis Unit or the Hemodialysis Unit

#### 4 LEARNING & TEACHING METHODS - EVALUATION

<b>TEACHING METHOD</b> Face to face, Distance learning, etc.	Face to face												
<b>USE OF INFORMATION &amp; COMMUNICATIONS TECHNOLOGY (ICT)</b> Use of ICT in Teaching, in Laboratory Education, in Communication with students	Use of ICT in Teaching Use of ICT in Communication with students												
<b>TEACHING ORGANIZATION</b> The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study/creation, project, creation, project. Etc.  The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards	<table border="1" data-bbox="794 479 1366 792"> <thead> <tr> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>26</td> </tr> <tr> <td>Tutoring</td> <td>26</td> </tr> <tr> <td>Clinical Exercise</td> <td>5</td> </tr> <tr> <td>Bibliographic research &amp; analysis</td> <td>55</td> </tr> <tr> <td><b>Total</b></td> <td><b>112</b></td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	26	Tutoring	26	Clinical Exercise	5	Bibliographic research & analysis	55	<b>Total</b>	<b>112</b>
Activity	Workload/semester												
Lectures	26												
Tutoring	26												
Clinical Exercise	5												
Bibliographic research & analysis	55												
<b>Total</b>	<b>112</b>												

<b>STUDENT EVALUATION</b> Description of the evaluation process  Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay/Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others  Please indicate all relevant information about the course assessment and how students are informed	<b>Student evaluation languages</b> Greek  <b>Method (Formative or Concluding)</b> Formative  <table border="1" data-bbox="807 1111 1465 1352"> <thead> <tr> <th>Student evaluation methods</th> <th>Percent</th> </tr> </thead> <tbody> <tr> <td>Written exam with multiple choice test</td> <td>80</td> </tr> <tr> <td>Written exam with short answer questions</td> <td>20</td> </tr> </tbody> </table>	Student evaluation methods	Percent	Written exam with multiple choice test	80	Written exam with short answer questions	20
Student evaluation methods	Percent						
Written exam with multiple choice test	80						
Written exam with short answer questions	20						

#### 5 Suggested Bibliography

Scott F. Gilbert MD (Editor), Daniel E. Weiner MD MS (Editor), NKF (Editor). National Kidney Foundation Primer on Kidney Diseases, 8th Edition, Elsevier, ISBN 9780323791229.

Edger Lerma, Mitchell H. Rosner, Mark A. Perazella. CURRENT Diagnosis & Treatment Nephrology & Hypertension, 2nd Edition, McGraw-Hill, ISBN 9781259861055

## COURSE OUTLINE

### 1 GENERAL

<b>SCHOOL</b>	SCHOOL OF HEALTH SCIENCES		
<b>DEPARTMENT</b>	DEPARTMENT OF MEDICINE		
<b>LEVEL OF STUDIES</b>	ISCED level 6 – Bachelor’s or equivalent level		
<b>COURSE CODE</b>		<b>SEMESTER</b>	10
<b>COURSE TITLE</b>	ANESTHESIOLOGY		
<b>TEACHING ACTIVITIES</b> If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labsetc. If the ECTS Credits are awarded to the whole course, then please indicate theteaching hours per week and the corresponding ECTS Credits.		<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>
		4	4.0
<b>COURSE TYPE</b> Background, General Knowledge, Scientific Area, Skill Development	Background, Scientific Area		
<b>PREREQUISITES</b>	No		
<b>TEACHING &amp; EXAMINATION LANGUAGE:</b>	Greek		
<b>COURSE OFFERED TO ERASMUSSTUDENTS:</b>			
<b>COURSE URL:</b>			

### 2 LEARNING OUTCOMES

<p><b>Learning Outcomes</b> Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</p>
<p>After the successful completion of the course the students will be in the position to: Know the peri-operative management of the patients</p> <ul style="list-style-type: none"> <li>– Be familiar with the medicines used in anesthesiology</li> <li>– Be familiar with the airway management intra operatively as well as in emergency situations</li> <li>– Acquire knowledge and experience in CardioPulmonary Resuscitation</li> </ul>

<p><b>General Skills</b></p> <p>Name the desirable general skills upon successful completion of the module</p> <p>Search, analysis and synthesis of data and information, ICT Use, Adaptation to new situations, Decision making, Autonomous work, Teamwork, Working in an international environment, Working in an interdisciplinary environment,</p>
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Production of new research ideas  
 Project design and management Equity and Inclusion, Respect for the natural environment, Sustainability, Demonstration of social, professional and moral responsibility and sensitivity to gender issues, Critical thinking, Promoting free, creative and inductive reasoning, communicate effectively in a medical environment  
 apply scientific principles, methods and knowledge to medical practice and research, examining a patient, evaluate clinical cases, order laboratory tests, make differential diagnoses, and negotiate a management plan.

Search, analysis and synthesis of data and information  
 ICT Use  
 Adaptation to new situations  
 Decision making  
 Working in an interdisciplinary environment  
 Equity and Inclusion  
 Demonstration of social, professional and moral responsibility and sensitivity to gender issues  
 Critical thinking  
 Promoting free, creative and inductive reasoning  
 Examining a patient  
 Evaluate clinical cases, order laboratory tests, make differential diagnoses, and negotiate a management plan  
 Communicate effectively in a medical environment  
 Apply scientific principles, methods and knowledge to medical practice and research

### 3 COURSE CONTENT

Lectures and theoretical tuition  
 Lessons:  
 Management of the upper airway- Cardio-Respiratory Resuscitation-basic and specialized  
 Elements of applied physiology of the respiratory system  
 Elements of applied physiology of the circulatory system  
 Preoperative-Preanesthetic assessment and preparation  
 Clinical pharmacology of the Autonomous Nervous System  
 Intravenous anesthetic agents- Local anesthetic agents  
 Inhalational anesthetic agents- Muscle relaxants  
 Types of anesthesia- Monitoring of vital functions  
 Critical events and complications during the peri-anesthetic period  
 Fluids and electrolytes- Acid-Base balance  
 Peri-operative blood and blood product administration  
 Circulatory collapse, shock. Management of the multiply injured patient  
 Physiology of one lung ventilation

Laboratory, tutorials, clinical practice  
 The clinical practical tuition of the students includes:  
 The anesthesiological management of the patient in the operating theatre (elective and emergency/acute)  
 Practical tutorials on the management of the upper airway and the basic cardio-respiratory resuscitation methods in models and simulation logistics.

### 4 LEARNING & TEACHING METHODS - EVALUATION

#### TEACHING METHOD

Face to face, Distance learning, etc.

Face to face

<p><b>USE OF INFORMATION &amp; COMMUNICATIONS TECHNOLOGY (ICT)</b> Use of ICT in Teaching, in Laboratory Education, in Communication with students</p>	<p>Use of ICT in Teaching Use of ICT in Laboratory Education Use of ICT in Communication with students</p>												
<p><b>TEACHING ORGANIZATION</b> The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research &amp; analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study/creation, project, creation, project. Etc.</p> <p>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards</p>	<table border="1"> <thead> <tr> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>39</td> </tr> <tr> <td>Clinical Exercise</td> <td>4</td> </tr> <tr> <td>Tutoring</td> <td>9</td> </tr> <tr> <td>Bibliographic research &amp; analysis</td> <td>55</td> </tr> <tr> <td><b>Total</b></td> <td><b>107</b></td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	39	Clinical Exercise	4	Tutoring	9	Bibliographic research & analysis	55	<b>Total</b>	<b>107</b>
Activity	Workload/semester												
Lectures	39												
Clinical Exercise	4												
Tutoring	9												
Bibliographic research & analysis	55												
<b>Total</b>	<b>107</b>												

<p><b>STUDENT EVALUATION</b> Description of the evaluation process</p> <p>Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay/Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others</p> <p>Please indicate all relevant information about the course assessment and how students are informed</p>	<p><b>Student evaluation languages</b> Greek</p> <p><b>Method (Formative or Concluding)</b> Concluding</p> <table border="1"> <thead> <tr> <th>Student evaluation methods</th> <th>Percent</th> </tr> </thead> <tbody> <tr> <td>Written exam with multiple choice test</td> <td>100</td> </tr> </tbody> </table>	Student evaluation methods	Percent	Written exam with multiple choice test	100
Student evaluation methods	Percent				
Written exam with multiple choice test	100				

## 5 Suggested Bibliography

Miller's Anesthesia, 2-Volume Set  
9th Edition - May 2, 2019  
Editors: Michael A. Gropper, Lars I. Eriksson, Lee A. Fleisher, Jeanine P. Wiener-Kronish, Neal H. Cohen, Kate Leslie  
Language: English  
Hardback ISBN: 9780323612630  
9 7 8 - 0 - 3 2 3 - 6 1 2 6 3 - 0  
Hardback ISBN: 9780323596046

## COURSE OUTLINE

### 1 GENERAL

<b>SCHOOL</b>	SCHOOL OF HEALTH SCIENCES		
<b>DEPARTMENT</b>	DEPARTMENT OF MEDICINE		
<b>LEVEL OF STUDIES</b>	ISCED level 6 – Bachelor’s or equivalent level		
<b>COURSE CODE</b>		<b>SEMESTER</b>	10
<b>COURSE TITLE</b>	CRITICAL CARE MEDICINE		
<b>TEACHING ACTIVITIES</b> If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labsetc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.		<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>
		4	4.0
<b>COURSE TYPE</b> Background, General Knowledge, Scientific Area, Skill Development	Background, General Knowledge		
<b>PREREQUISITES</b>	No		
<b>TEACHING &amp; EXAMINATION LANGUAGE:</b>	Greek		
<b>COURSE OFFERED TO ERASMUS STUDENTS:</b>			
<b>COURSE URL:</b>			

### 2 LEARNING OUTCOMES

<p><b>Learning Outcomes</b> Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</p> <p>Understanding the pathophysiology and treatment of shock and acute respiratory failure. The importance and treatment of serious infections in the critically ill The use of vasopressors and sedatives agents in the ICU Basic understanding of different models of mechanical ventilation</p>
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<p><b>General Skills</b></p> <p>Name the desirable general skills upon successful completion of the module</p> <p>Search, analysis and synthesis of data and information, ICT Use, Adaptation to new situations, Decision making, Autonomous work, Teamwork, Working in an international environment, Working in an interdisciplinary environment, Production of new research ideas Project design and management Equity and Inclusion, Respect for the natural environment, Sustainability, Demonstration</p>
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of social, professional and moral responsibility and sensitivity to gender issues, Critical thinking, Promoting free, creative and inductive reasoning

Search, analysis and synthesis of data and information, ICT Use,  
Adaptation to new situations,  
Decision making  
Teamwork  
Critical thinking,  
Promoting free,  
creative and inductive reasoning

### 3 COURSE CONTENT

#### Theory

Diagnostic approach, monitoring and treatment of cardio-respiratory failure  
Diagnosis and treatment of different types of shock  
Mechanical ventilation  
Hemodynamic monitoring  
Acid-base and electrolyte disorders  
Diagnostic and therapeutic approach to serious infections in the ICU

#### Clinical practice

Monitoring of vital functions and ventilatory support in the critically ill patient in the ICU  
Discussion of different clinical cases-problem-based learning and understanding of the pathophysiology of critical illness

### 4 LEARNING & TEACHING METHODS - EVALUATION

<b>TEACHING METHOD</b> Face to face, Distance learning, etc.	Face to face Distance learning										
<b>USE OF INFORMATION &amp; COMMUNICATIONS TECHNOLOGY (ICT)</b> Use of ICT in Teaching, in Laboratory Education, in Communication with students	Use of ICT in Teaching										
<b>TEACHING ORGANIZATION</b> The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study/creation, project, creation, project. Etc.  The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards	<table border="1"> <thead> <tr> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>39</td> </tr> <tr> <td>Clinical Exercise</td> <td>7</td> </tr> <tr> <td>Bibliographic research &amp; analysis</td> <td>6</td> </tr> <tr> <td><b>Total</b></td> <td><b>52</b></td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	39	Clinical Exercise	7	Bibliographic research & analysis	6	<b>Total</b>	<b>52</b>
Activity	Workload/semester										
Lectures	39										
Clinical Exercise	7										
Bibliographic research & analysis	6										
<b>Total</b>	<b>52</b>										
<b>STUDENT EVALUATION</b> Description of the evaluation process	<b>Student evaluation languages</b> Greek										

Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay/Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others

Please indicate all relevant information about the course assessment and how students are informed

**Method (Formative or Concluding)**

Formative

Student evaluation methods	Percent
Written exam with multiple choice test	80
Oral exam	20

**5 Suggested Bibliography**

ICU Book, Marino  
 Critical Care and Emergency Medicine, Ken Hillman, Gillian Bishop  
 Suggested journals: Critical Care, Annals of Critical Care, Crit Care Med

**COURSE OUTLINE**

**1 GENERAL**

<b>SCHOOL</b>	SCHOOL OF HEALTH SCIENCES		
<b>DEPARTMENT</b>	DEPARTMENT OF MEDICINE		
<b>LEVEL OF STUDIES</b>	ISCED level 6 – Bachelor’s or equivalent level		
<b>COURSE CODE</b>		<b>SEMESTER</b>	11-12
<b>COURSE TITLE</b>	INTERNAL MEDICINE II (clinical practice)		
<b>TEACHING ACTIVITIES</b> If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labsetc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.	<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>	
	35	20	
<b>COURSE TYPE</b> Background, General Knowledge, Scientific Area,	Scientific Area		

Skill Development	
<b>PREREQUISITES</b>	No
<b>TEACHING &amp; EXAMINATION LANGUAGE:</b>	Greek
<b>COURSE OFFERED TO ERASMUSSTUDENTS:</b>	Yes
<b>COURSE URL:</b>	

## 2 LEARNING OUTCOMES

### Learning Outcomes

Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.

Upon successful completion of the course the student will be able to:

- Know the basic knowledge of epidemiology, etiology, clinical phenotype, as well as the diagnostic methods indicated for the investigation of various human diseases, to the extent expected of any physician, regardless of the specialty
- Perform clinical evaluation of patients, prioritize possible diagnoses, and orders diagnostic tests to resolve differential diagnostic problems
- Apply the therapeutic principles of the most important or frequent human diseases
- Pose research questions and design scientific approaches to answer/resolve them

### General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information, ICT Use, Adaptation to new situations, Decision making, Autonomous work, Teamwork, Working in an international environment, Working in an interdisciplinary environment, Production of new research ideas

Project design and management Equity and Inclusion, Respect for the natural environment, Sustainability, Demonstration of social, professional and moral responsibility and sensitivity to gender issues, Critical thinking, Promoting free, creative and inductive reasoning

The successful completion of the course enhances the students' ability to:

- examine a patient and report thoroughly the history and the findings
- evaluate clinical cases, make differential diagnoses, order the appropriate laboratory tests and design a potential therapeutic plan (decision making)
- provide care in emergencies, including resuscitation
- perform common procedures that are used in internal medicine practice (eg venipuncture, catheterization, paracentesis etc)
- work as a member of a medical team and communicate effectively
- apply the therapeutic principles of evidence-based medicine
- prescribe commonly used medicines
- use appropriate medical ICTs
- evaluate and present the findings of the literature
- apply ethical and legal principles in medical practice

### 3 COURSE CONTENT

#### Theoretical background:

- Insulin resistance – metabolic syndrome
- Chronic complications of diabetes mellitus
- Treatment of diabetes mellitus
- Treatment of dyslipidemia
- Metabolism - Obesity
- Investigation & treatment of thyroid diseases
- Secondary hypertension
- Treatment of arterial hypertension
- Approach to the patient with stroke
- Approach to the patient with COPD
- Respiratory infections
- Hepatitis
- Liver cirrhosis - Ascites
- Diagnostic approach – treatment of diarrheal diseases
- Inflammatory bowel diseases
- Upper gastrointestinal bleeding
- Approach and treatment of pancreatitis
- Diagnostic investigation & treatment of a patient with anemia
- Diagnostic approach to rheumatic diseases
- Therapeutic treatment & monitoring of rheumatic diseases
- Metabolic diseases of the bones
- Approaching a patient with fever/inflammation of unknown origin
- Approach & treatment of the septic patient
- Disorders of the acid-base balance
- Thrombotic disorders
- Critical study & evaluation of literature

#### Clinical Practice:

During this three-month period, students participate actively under close specialist guidance in the daily clinical routine of the Internal Medicine department including the inpatient & outpatient clinics and emergencies. This aims to provide students with hands-on, pragmatic, training, as well as, the development of critical thinking in crucial aspects for which theoretical training itself is inadequate.

#### Workshops:

- Discussion of interesting cases/clinical scenarios presented by the students (Interactive Cases Learning)
- Presentation and discussion of interesting articles of the literature (Journal club)

### 4 LEARNING & TEACHING METHODS - EVALUATION

<b>TEACHING METHOD</b> Face to face, Distance learning, etc.	Face to face
<b>USE OF INFORMATION &amp; COMMUNICATIONS TECHNOLOGY (ICT)</b> Use of ICT in Teaching, in Laboratory Education, in Communication with students	Use of ICT in Teaching Use of ICT in Communication with students

**TEACHING ORGANIZATION**

The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study/creation, project, creation, project. Etc.

The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards

Activity	Workload/semester
Lectures	24
Workshops	24
Clinical practice	300
Be on duty (8h shift)	72
Task (case presentation)	8
Study of suggested textbooks	150
Study of scientific articles	22
<b>Total</b>	<b>240</b>

**STUDENT EVALUATION**

Description of the evaluation process

Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay/Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others

Please indicate all relevant information about the course assessment and how students are informed

**Student evaluation languages**

Greek

**Method (Formative or Concluding)**

Formative

Student evaluation methods	Percent
Written exam with multiple choice test	40
Written exam with short answer questions	40
Oral examination/tasks	20

Full attendance of clinical practice courses and workshops is a prerequisite for participation in the exams

**5 Suggested Bibliography****Books:**

- Mayo Clinic Internal Medicine Board Review (Mayo Clinic Scientific Press)
- Johns Hopkins Internal Medicine Board Review E-Book: Certification and Recertification
- CURRENT Medical Diagnosis and Treatment by MA. Papadakis, MW. Rabow, KR. McQuaid, M. Gandhi

**Journal:** New England Journal of Medicine

**Web:** [www.medscape.com/internalmedicine](http://www.medscape.com/internalmedicine)

## COURSE OUTLINE

### 1 GENERAL

<b>SCHOOL</b>	SCHOOL OF HEALTH SCIENCES		
<b>DEPARTMENT</b>	DEPARTMENT OF MEDICINE		
<b>LEVEL OF STUDIES</b>	ISCED level 6 – Bachelor’s or equivalent level		
<b>COURSE CODE</b>		<b>SEMESTER</b>	11-12
<b>COURSE TITLE</b>	SURGERY (clinical practice)		
<b>TEACHING ACTIVITIES</b> If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labsetc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.	<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>	
	10	17.0	
<b>COURSE TYPE</b> Background, General Knowledge, Scientific Area, Skill Development	Scientific Area		
<b>PREREQUISITES</b>	No		
<b>TEACHING &amp; EXAMINATION LANGUAGE:</b>	Greek		
<b>COURSE OFFERED TO ERASMUS STUDENTS:</b>	Yes		
<b>COURSE URL:</b>			

### 2 LEARNING OUTCOMES

<p><b>Learning Outcomes</b> Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</p>
<p>Integrate Medical knowledge (MK) to address mechanisms of surgical diseases and trauma.            Understand and correlate in Surgical Treatment Biomedical, Clinical, Epidemiological, and Social Behavioral Sciences, Professional, Social, and Moral responsibility - managing gender issues.            Complete a surgical clinical assessment            Recognize surgical diseases and syndromes            Evaluate surgical emergencies            Be able to evaluate organ's dysfunction post-op and potential distress pre-op            Be able to understand surgical pathophysiology and metabolism            Be familiar with trauma and the principles of trauma care            Showing surgical skills in general surgical clinical practice            Fulfill simple invasive procedures            Fulfill life-shaving procedures            Fulfill plan of operations            Fulfill interventional and interdisciplinary teamwork            Fulfill principles of asepsis - antisepsis - sterilization</p>

Fulfill principles of management and training in the OR  
Fulfill principles of management and training in the ER  
Fulfill principles of management and training in the ICU

### General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information, ICT Use, Adaptation to new situations, Decision making, Autonomous work, Teamwork, Working in an international environment, Working in an interdisciplinary environment, Production of new research ideas  
Project design and management Equity and Inclusion, Respect for the natural environment, Sustainability, Demonstration of social, professional and moral responsibility and sensitivity to gender issues, Critical thinking, Promoting free, creative and inductive reasoning

Search, analysis and synthesis of data and information  
ICT Use  
Decision making  
Autonomous work  
Teamwork  
Working in an international environment  
Working in an interdisciplinary environment

## 3 COURSE CONTENT

### Surgical Assessment and Management:

1. Medical problems in the surgical patient
2. Nutrition - Malnutrition
3. Wound healing
4. Endocrine diseases
5. Breast
6. Esophagus
7. Stomach - Duodenum
8. Small intestine
9. Colon and rectum
10. Anus
11. Appendix
12. Peritoneum - Intraperitoneal infections - Retro peritoneum - Omentum - Mesentery
13. Biliary tract
14. Portal Hypertension
15. Pancreas
16. Liver
17. Spleen
18. Acute Abdomen
19. Abdominal wall - Hernias
20. Soft tissue and Skin tumors
21. Surgical infections
22. Critically -ill patient
23. Trauma patients - Pathology
24. Burn injuries
25. Imaging in surgical conditions/patient
26. Veins / Arteries
27. Endoscopic surgery

28. Laparoscopic Surgery
29. Operations - techniques - surgical complications
30. Principles of Gynecology / Obstetrics, Urology, Thoracic surgery, Pediatric surgery, Neurosurgery, Plastic surgery, Orthopedics, Transplantation in general surgery
31. Surgical oncology and cancer-patient care
32. Surgical trainees - Surgical Specialists
33. Biology and Industrial science
34. Bioethics in surgery
35. Clinical studies in surgery

**Clinical Practice:**

Outpatient surgical clinic  
 Outpatient specialist clinics (Breast, Endocrine, oncology, etc)  
 Emergency department  
 Theaters - OR  
 One day surgical clinic  
 Clinical rounds  
 Interdisciplinary lectures \ rounds \ outpatient clinics

#### 4 LEARNING & TEACHING METHODS - EVALUATION

<b>TEACHING METHOD</b> Face to face, Distance learning, etc.	Face to face Distance learning														
<b>USE OF INFORMATION &amp; COMMUNICATIONS TECHNOLOGY (ICT)</b> Use of ICT in Teaching, in Laboratory Education, in Communication with students	Use of ICT in Teaching Use of ICT in Communication with students														
<b>TEACHING ORGANIZATION</b> The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study/creation, project, creation, project. Etc.  The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards	<table border="1"> <thead> <tr> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>75</td> </tr> <tr> <td>Clinical Exercise</td> <td>300</td> </tr> <tr> <td>Study Visits</td> <td>75</td> </tr> <tr> <td>Bibliographic research &amp; analysis</td> <td>20</td> </tr> <tr> <td>Writing Project</td> <td>30</td> </tr> <tr> <td><b>Total</b></td> <td><b>500</b></td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	75	Clinical Exercise	300	Study Visits	75	Bibliographic research & analysis	20	Writing Project	30	<b>Total</b>	<b>500</b>
Activity	Workload/semester														
Lectures	75														
Clinical Exercise	300														
Study Visits	75														
Bibliographic research & analysis	20														
Writing Project	30														
<b>Total</b>	<b>500</b>														

<b>STUDENT EVALUATION</b> Description of the evaluation process  Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay/Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others  Please indicate all relevant information about the course assessment and how students are informed	<b>Student evaluation languages</b> Greek  <b>Method (Formative or Concluding)</b> Formative  <table border="1"> <thead> <tr> <th>Student evaluation methods</th> <th>Percent</th> </tr> </thead> <tbody> <tr> <td>Oral exam</td> <td>40</td> </tr> <tr> <td>Written exam with short answer questions</td> <td>50</td> </tr> <tr> <td>Patient clinical examination</td> <td>10</td> </tr> </tbody> </table>	Student evaluation methods	Percent	Oral exam	40	Written exam with short answer questions	50	Patient clinical examination	10
Student evaluation methods	Percent								
Oral exam	40								
Written exam with short answer questions	50								
Patient clinical examination	10								

## 5 Suggested Bibliography

### 1. General Surgery

Authors: J. Kanellos, S. Aggelopoulos, J. Maroulis, M. Mitsis, M. Pitiakoudis, K. Tepetes, E. Chrisos Edition: 3rd /2021  
ISBN:9786185288495 Textbook (984 pages)

Publisher: POTODA Publ.

Publications: A. Havales - K. Hadjisimeon Corp.

### 2. Surgery

Authors: D. K. Voros Edition: 2nd /2014 ISBN:9789603949763 Textbook (1000 pages)

Publisher: A.E. Parisianou Publications: Parisianou Corp.

### 3. Sabiston - Surgery B. II

Edition: 2nd /2011

Authors: Townsend C., Beauchamp R., Evers B., Mattox K.

ISBN:9789604892235

Textbook

Publications: BROKEN HILL PUBLISHERS LTD

## COURSE OUTLINE

### 1 GENERAL

<b>SCHOOL</b>	SCHOOL OF HEALTH SCIENCES		
<b>DEPARTMENT</b>	DEPARTMENT OF MEDICINE		
<b>LEVEL OF STUDIES</b>	ISCED level 6 – Bachelor’s or equivalent level		
<b>COURSE CODE</b>		<b>SEMESTER</b>	11-12
<b>COURSE TITLE</b>	PAEDIATRICS (clinical practice)		
<b>TEACHING ACTIVITIES</b> If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labsetc. If the ECTS Credits are awarded to the whole course, then please indicate theteaching hours per week and the corresponding ECTS Credits.	<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>	
	6	10.0	
<b>COURSE TYPE</b> Background, General Knowledge, Scientific Area, Skill Development	General Knowledge		

<b>PREREQUISITES</b>	No
<b>TEACHING &amp; EXAMINATION LANGUAGE:</b>	Greek
<b>COURSE OFFERED TO ERASMUSSTUDENTS:</b>	Yes
<b>COURSE URL:</b>	

## 2 LEARNING OUTCOMES

### Learning Outcomes

Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.

Training on the diagnosis and treatment of Hematologic, Oncologic, and Immunologic diseases, Allergic and Respiratory Diseases, Infectious diseases, as well as Kidney, Neurologic, Metabolic-Endocrine, and Digestive Disorders of childhood. Special emphasis will also be placed on understanding and implementing correctly the Greek National Immunization Program of 2023. Finally, students will be allowed to present and examine pediatric patients in the nursing wards during morning visits, with an emphasis on patients for whom theoretical knowledge was previously offered through lectures (practical training). All lectures are held in the lecture hall of the Pediatric clinic, using a computer and a slide projector (PowerPoint presentations).

### General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information, ICT Use, Adaptation to new situations, Decision making, Autonomous work, Teamwork, Working in an international environment, Working in an interdisciplinary environment, Production of new research ideas

Project design and management Equity and Inclusion, Respect for the natural environment, Sustainability, Demonstration of social, professional and moral responsibility and sensitivity to gender issues, Critical thinking, Promoting free, creative and inductive reasoning

Search, analysis and synthesis of data and information

ICT Use

Autonomous work

Teamwork

Working in an interdisciplinary environment Equity and Inclusion

## 3 COURSE CONTENT

The purpose of the course in Pediatrics is to provide theoretical knowledge through lectures on the most important diseases of childhood and adolescence. In particular, emphasis will be placed on the diagnosis and treatment of Hematologic, Oncologic, and Immunologic diseases, Allergic and Respiratory Diseases, Infectious diseases, as well as Kidney, Neurologic, Metabolic-Endocrine, and Digestive disorders. Special emphasis will also be placed on understanding and implementing correctly the Greek National Immunization Program of 2023.

## 4 LEARNING & TEACHING METHODS - EVALUATION

<b>TEACHING METHOD</b> Face to face, Distance learning, etc.	Face to face
-----------------------------------------------------------------	--------------

<p><b>USE OF INFORMATION &amp; COMMUNICATIONS TECHNOLOGY (ICT)</b> Use of ICT in Teaching, in Laboratory Education, in Communication with students</p>	<p>Use of ICT in Teaching Use of ICT in Laboratory Education Use of ICT in Communication with students</p>								
<p><b>TEACHING ORGANIZATION</b> The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research &amp; analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study/creation, project, creation, project. Etc.</p> <p>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards</p>	<table border="1"> <thead> <tr> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>200</td> </tr> <tr> <td>Seminars</td> <td>50</td> </tr> <tr> <td><b>Total</b></td> <td><b>250</b></td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	200	Seminars	50	<b>Total</b>	<b>250</b>
Activity	Workload/semester								
Lectures	200								
Seminars	50								
<b>Total</b>	<b>250</b>								

<p><b>STUDENT EVALUATION</b> Description of the evaluation process</p> <p>Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay/Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others</p> <p>Please indicate all relevant information about the course assessment and how students are informed</p>	<p><b>Student evaluation languages</b> English</p> <p><b>Method (Formative or Concluding)</b> Formative</p> <table border="1"> <thead> <tr> <th>Student evaluation methods</th> <th>Percent</th> </tr> </thead> <tbody> <tr> <td>Written exam with multiple choice test</td> <td>75</td> </tr> <tr> <td>Written exam with essay development answer questions</td> <td>25</td> </tr> </tbody> </table>	Student evaluation methods	Percent	Written exam with multiple choice test	75	Written exam with essay development answer questions	25
Student evaluation methods	Percent						
Written exam with multiple choice test	75						
Written exam with essay development answer questions	25						

## 5 Suggested Bibliography

Εθνικό Πρόγραμμα Εμβολιασμών Παιδιών και Εφήβων 2023. <https://www.moh.gov.gr/artides/health/dieythynsh-dhmosias-ygieinhs/emboliasmoi/ethniko-programma-emboliasmwn-epe-paidiwn-kai-efhbwn/11252-programma-emboliasmwn-paidiwn-efhbwn-2023>

Βασική Παιδιατρική, 4η έκδοση, Κανακούδη-Τσακαλίδου Φλωρεντία, Παπαχρήστου Φώτιος, Δρόσου-Αγακίδου Βασιλική, Ζαφειρίου Δημήτριος

## COURSE OUTLINE

### 1 GENERAL

<b>SCHOOL</b>	SCHOOL OF HEALTH SCIENCES		
<b>DEPARTMENT</b>	DEPARTMENT OF MEDICINE		
<b>LEVEL OF STUDIES</b>	ISCED level 6 – Bachelor’s or equivalent level		
<b>COURSE CODE</b>		<b>SEMESTER</b>	11-12
<b>COURSE TITLE</b>	OBSTETRICS AND GYNECOLOGY (clinical practice)		
<b>TEACHING ACTIVITIES</b> If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labsetc. If the ECTS Credits are awarded to the whole course, then please indicate theteaching hours per week and the corresponding ECTS Credits.		<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>
		30	10.0
<b>COURSE TYPE</b> Background, General Knowledge, Scientific Area, Skill Development	Background, General Knowledge, Scientific Area		
<b>PREREQUISITES</b>	No		
<b>TEACHING &amp; EXAMINATION LANGUAGE:</b>	Greek		
<b>COURSE OFFERED TO ERASMUSSTUDENTS:</b>	Yes		
<b>COURSE URL:</b>			

### 2 LEARNING OUTCOMES

<p><b>Learning Outcomes</b> Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</p>
<p>The learning objectives of the course include:            Knowledge and experience in the pathophysiology, diagnosis and treatment of the main entities related to obstetrics.            Knowledge and experience in the diagnosis and treatment of conditions caused by insufficiency of placental function.            Knowledge and experience in the recognition and treatment of obstetric complications in the context of termination of labor            Knowledge and acquisition of experience in the pathophysiology, diagnosis and treatment of the main pathological entities related to gynecology.            Knowledge and acquisition of experience in the diagnosis and treatment of conditions caused by insufficiency of the function (acute and chronic) of gynecological organs.            Knowledge and experience in the recognition and treatment of gynecological complications in the context of systemic diseases            Upon successful completion of the course, the student will be able to:            Upon successful completion of the course, the student will be able to:            – To clinically and laboratory diagnose the clinical syndromes with which the main gynecological diseases manifest</p>

- To make a differential diagnosis between Acute and Chronic Damage of the gynecological organs  
To recognize the presence of signs of gynecological damage in patients with systemic diseases or diseases involving systems other than gynecological organs

### General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information, ICT Use, Adaptation to new situations, Decision making, Autonomous work, Teamwork, Working in an international environment, Working in an interdisciplinary environment, Production of new research ideas  
Project design and management Equity and Inclusion, Respect for the natural environment, Sustainability, Demonstration of social, professional and moral responsibility and sensitivity to gender issues, Critical thinking, Promoting free, creative and inductive reasoning

Search, analysis and synthesis of data and information  
Adaptation to new situations  
Decision making  
Working in an interdisciplinary environment  
Equity and Inclusion  
Demonstration of social, professional and moral responsibility and sensitivity to gender issues  
Critical thinking  
Promoting free, creative and inductive reasoning  
Examining a patient  
Evaluate clinical cases, order laboratory tests, make differential diagnoses, and negotiate a management plan  
Communicate effectively in a medical environment  
Apply scientific principles, methods and knowledge to medical practice and research

## 3 COURSE CONTENT

Theoretical:

1. Anatomy of the female reproductive system
2. Physiology of the female reproductive system
3. Gynecological Examination-Diagnostic methods Congenital and topographic abnormalities of the uterus
4. Polycystic ovary syndrome Ovarian cancer
5. Evidence of child adolescent Gynecology
6. Climax-Menopause
8. Contraception
9. Breast diseases Breast cancer
10. Sterilization Assisted reproduction
11. Neoplasms of the uterus Diseases of the body of the uterus (except cancer)
12. Diseases of the cervix
13. Adenomyosis – Endometriosis – Uterine inflammations

Physiology of Reproduction

2. Diagnosis of pregnancy
3. Obstetric Anatomy-Physiology
4. Physiology of the embryo-embryoplacental unit
5. Fertilization and development of the embryo
6. Prenatal control
7. Monitoring the pregnancy
8. Fetal monitoring
9. Normal childbirth
10. Pathology of childbirth Dystocias - Abnormal shapes and projections
11. Obstetric bleeding
12. Complications of the 1st trimester
13. Multiple pregnancy

14 High risk pregnancy Preeclampsia-Eclampsia  
 15. Gestational diabetes...  
 clinical practice for three weeks every day, on-call and participation in all activities of the University Obstetrics and Gynecology Clinic

#### 4 LEARNING & TEACHING METHODS - EVALUATION

<b>TEACHING METHOD</b> Face to face, Distance learning, etc.	Face to face										
<b>USE OF INFORMATION &amp; COMMUNICATIONS TECHNOLOGY (ICT)</b> Use of ICT in Teaching, in Laboratory Education, in Communication with students	Use of ICT in Teaching Use of ICT in Laboratory Education Use of ICT in Communication with students										
<b>TEACHING ORGANIZATION</b> The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study/creation, project, creation, project. Etc.  The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards	<table border="1"> <thead> <tr> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>50</td> </tr> <tr> <td>Clinical Exercise</td> <td>150</td> </tr> <tr> <td>Bibliographic research &amp; analysis</td> <td>50</td> </tr> <tr> <td><b>Total</b></td> <td><b>250</b></td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	50	Clinical Exercise	150	Bibliographic research & analysis	50	<b>Total</b>	<b>250</b>
Activity	Workload/semester										
Lectures	50										
Clinical Exercise	150										
Bibliographic research & analysis	50										
<b>Total</b>	<b>250</b>										

<b>STUDENT EVALUATION</b> Description of the evaluation process  Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay/Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others  Please indicate all relevant information about the course assessment and how students are informed	<b>Student evaluation languages</b> Greek  <b>Method (Formative or Concluding)</b> Formative  <table border="1"> <thead> <tr> <th>Student evaluation methods</th> <th>Percent</th> </tr> </thead> <tbody> <tr> <td>Written exam with multiple choice test</td> <td>100</td> </tr> </tbody> </table>	Student evaluation methods	Percent	Written exam with multiple choice test	100
Student evaluation methods	Percent				
Written exam with multiple choice test	100				

#### 5 Suggested Bibliography

##### 1. ΚΛΙΝΙΚΗ ΜΑΙΕΥΤΙΚΗ & ΓΥΝΑΙΚΟΛΟΓΙΑ

Συγγραφείς: BRIAN A. MAGOWAN, PHILIP OWEN, ANDREW THOMSON Επιμέλεια ελληνικής έκδοσης Νικόλαος Νικολέττος

4η Ελληνική Έκδοση

COPYRIGHT 2021, ISBN :978-960-583-561 -3 ΕΠΙΣΤΗΜΟΝΙΚΕΣ ΕΚΔΟΣΕΙΣ ΠΑΡΙΣΙΑΝΟΥ Α.Ε.

##### 2. ΜΑΙΕΥΤΙΚΗ ΚΑΙ ΓΥΝΑΙΚΟΛΟΓΙΑ

Συγγραφείς: CHARLES R .B. BECKMANN, FRANK W. LING, WILLIAM N.P. HERBERT, DOUGLAS W. LAUBE, ROGER CASANOVA, ALICE CHUANG, ALICE CHUANG, ALICE R. GOEPERT, NANCY A. HUEPPCHEN, PATRICE M. WEISS

Επιμέλεια ελληνικής έκδοσης : Αλέξανδρος Ι. Δαπόντε 7η Αγγλική Έκδοση

## COURSE OUTLINE

### 1 GENERAL

<b>SCHOOL</b>	SCHOOL OF HEALTH SCIENCES		
<b>DEPARTMENT</b>	DEPARTMENT OF MEDICINE		
<b>LEVEL OF STUDIES</b>	ISCED level 6 – Bachelor’s or equivalent level		
<b>COURSE CODE</b>		<b>SEMESTER</b>	11-12
<b>COURSE TITLE</b>	NEUROLOGY (clinical practice)		
<b>TEACHING ACTIVITIES</b> If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labsetc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.		<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>
		2	3.0
<b>COURSE TYPE</b> Background, General Knowledge, Scientific Area, Skill Development	Scientific Area		
<b>PREREQUISITES</b>	No		
<b>TEACHING &amp; EXAMINATION LANGUAGE:</b>	Greek		
<b>COURSE OFFERED TO ERASMUS STUDENTS:</b>	Yes		
<b>COURSE URL:</b>			

### 2 LEARNING OUTCOMES

<p><b>Learning Outcomes</b> Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</p> <p>The knowledge, competences and skills that students should have after successful completion of the educational process are:</p> <ul style="list-style-type: none"> <li>-To obtain a complete and reliable history.</li> <li>-To perform a focused and reliable neurological examination.</li> <li>-The ability to examine patients with impaired level of consciousness or abnormal mental status.</li> <li>-The presentation in a clear, concise, and in-depth verbal presentation of the patient's history and examination findings.</li> <li>-The preparation of a clear, comprehensive, and thorough written presentation of the patient's history and examination - (Ideally) ability to perform a lumbar puncture.</li> <li>-A differential diagnosis based on lesion location, disease course, and associated past medical history.</li> <li>-An awareness of the principles underlying a systematic approach to the management of common neurological diseases (such as the recognition and management of conditions that are potential emergencies).</li> <li>-Awareness of situations in which it is appropriate to seek consultant neurological assessment.</li> <li>-To review and interpret medical literature (including electronic databases) relevant to specific patient care issues.</li> </ul>
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## General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information, ICT Use, Adaptation to new situations, Decision making, Autonomous work, Teamwork, Working in an international environment, Working in an interdisciplinary environment, Production of new research ideas  
Project design and management Equity and Inclusion, Respect for the natural environment, Sustainability, Demonstration of social, professional and moral responsibility and sensitivity to gender issues, Critical thinking, Promoting free, creative and inductive reasoning

Search, analysis and synthesis of data and information, ICT Use  
Adaptation to new situations  
Decision making  
Autonomous work  
Teamwork  
Working in an international environment  
Working in an interdisciplinary environment  
Production of new research ideas  
Equity and Inclusion  
Demonstration of social, professional and moral responsibility and sensitivity to gender issues  
Critical thinking  
Promoting free, creative and inductive reasoning  
Examining a patient  
Evaluate clinical cases, order laboratory tests, make differential diagnoses, and negotiate a management plan  
Communicate effectively in a medical environment  
Apply scientific principles, methods and knowledge to medical practice and research

## 3 COURSE CONTENT

1. The Neurological Examination.  
Performing a neurological examination.  
Examination of the comatose patient.  
Recognition and presentation of abnormal findings of the neurological examination.

2. Localization diagnostics (general principles in the diagnosis of diseases at the following levels).  
Cerebral hemispheres (lobes, thalamus, basal ganglia).  
Posterior cranial cavity (brain stem, cerebellum).  
Spinal cord.  
Roots and plexuses.  
Peripheral nerves - including cranial nerves (mononeuropathy - polyneuropathy - multiple mononeuropathy).  
Neuromuscular synapse.  
Muscles.

3. General principles for diagnosis, assessment, treatment of the following neurological diseases.  
Neurological intensive care.  
Emergencies in neurology.  
Vascular brain diseases.  
Demyelinating diseases.  
Movement disorders.  
Behavioural neurology.  
Epilepsy.  
Neuromuscular and spinal cord diseases.  
Cranial nerve disorders.  
Pain and Headache.

Neuro-oncology and paraneoplastic diseases. Neurological manifestations of systemic diseases.  
 4.Diagnostic tests in Neurology  
 Electroencephalography.  
 Electroneurography/Electromyography.  
 Neuroimaging.  
 Neurochemistry/Neuroimmunology. Neuroradiology etc.

#### 4 LEARNING & TEACHING METHODS - EVALUATION

<b>TEACHING METHOD</b> Face to face, Distance learning, etc.	Face to face						
<b>USE OF INFORMATION &amp; COMMUNICATIONS TECHNOLOGY (ICT)</b> Use of ICT in Teaching, in Laboratory Education, in Communication with students	Use of ICT in Teaching Use of ICT in Laboratory Education Use of ICT in Communication with students						
<b>TEACHING ORGANIZATION</b> The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study/creation, project, creation, project. Etc.  The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards	<table border="1" data-bbox="858 730 1406 864"> <thead> <tr> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Clinical Exercise</td> <td>75</td> </tr> <tr> <td><b>Total</b></td> <td><b>75</b></td> </tr> </tbody> </table>	Activity	Workload/semester	Clinical Exercise	75	<b>Total</b>	<b>75</b>
Activity	Workload/semester						
Clinical Exercise	75						
<b>Total</b>	<b>75</b>						

<b>STUDENT EVALUATION</b> Description of the evaluation process  Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay/Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others  Please indicate all relevant information about the course assessment and how students are informed	<b>Student evaluation languages</b> Greek  <b>Method (Formative or Concluding)</b> Formative  <table border="1" data-bbox="810 1361 1465 1518"> <thead> <tr> <th>Student evaluation methods</th> <th>Percent</th> </tr> </thead> <tbody> <tr> <td>Oral exam</td> <td>50</td> </tr> <tr> <td>Patient clinical examination</td> <td>50</td> </tr> </tbody> </table>	Student evaluation methods	Percent	Oral exam	50	Patient clinical examination	50
Student evaluation methods	Percent						
Oral exam	50						
Patient clinical examination	50						

#### 5 Suggested Bibliography

Neuroanatomy through Clinical Cases 3rd Edition, by Hal Blumenfeld. Publisher: Sinauer Associates is an imprint of Oxford University Press.

Neurology (Mount Sinai Expert Guides) 1st Edition, by Stuart C. Sealfon, Charles B. Stacy, Rajeev Motiwala. Publisher: Wiley-Blackwell

## COURSE OUTLINE

### 1 GENERAL

<b>SCHOOL</b>	SCHOOL OF HEALTH SCIENCES		
<b>DEPARTMENT</b>	DEPARTMENT OF MEDICINE		
<b>LEVEL OF STUDIES</b>	ISCED level 6 – Bachelor’s or equivalent level		
<b>COURSE CODE</b>		<b>SEMESTER</b>	11-12
<b>COURSE TITLE</b>	PSYCHIATRY (Clinical Exercise)		
<b>TEACHING ACTIVITIES</b> If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labsetc. If the ECTS Credits are awarded to the whole course, then please indicate theteaching hours per week and the corresponding ECTS Credits.		<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>
			3.0
<b>COURSE TYPE</b> Background, General Knowledge, Scientific Area, Skill Development	Skill development		
<b>PREREQUISITES</b>	No		
<b>TEACHING &amp; EXAMINATION LANGUAGE:</b>	Greek		
<b>COURSE OFFERED TO ERASMUSSTUDENTS:</b>	Yes		
<b>COURSE URL:</b>			

### 2 LEARNING OUTCOMES

<p><b>Learning Outcomes</b> Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</p>
<p>After the successful completion of the course, the student will be able to:</p> <ul style="list-style-type: none"> <li>• Perform and document clinical psychiatric examination of patients</li> <li>• Collect and select information to compose a medical psychiatric record</li> <li>• Identify signs and symptoms of frequent and/or severe psychiatric disorders</li> <li>• Perform diagnosis and differential diagnosis of psychiatric disorders</li> <li>• Evaluate the clinical severity, course, and prognosis of the psychiatric disorder of an individual</li> <li>• Recognize the importance of developing a therapeutic relationship with a patient</li> <li>• Develop a therapeutic relationship with a patient</li> <li>• Combine and compose his/her knowledge and experience from the rest of the medical modules, to identify comorbidity</li> <li>• Know the main indications, contraindications, interactions, and side effects of biological therapies used in Psychiatry</li> <li>• Suggest treatment plans for patients that they examine</li> <li>• Know the main psychiatric both hospital and community services along with the purpose of their function within the network of mental health services of a catchment area.</li> </ul>

- Be significantly familiar with people who manifest major psychiatric disorders and are hospitalized or live in the community

### General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information, ICT Use, Adaptation to new situations, Decision making, Autonomous work, Teamwork, Working in an international environment, Working in an interdisciplinary environment, Production of new research ideas  
Project design and management Equity and Inclusion, Respect for the natural environment, Sustainability, Demonstration of social, professional and moral responsibility and sensitivity to gender issues, Critical thinking, Promoting free, creative and inductive reasoning

Adaptation to new situations  
Autonomous work  
Teamwork  
Decision making  
Working in an interdisciplinary environment  
Equity and Inclusion  
Demonstration of social, professional and moral responsibility and sensitivity to gender issues  
Critical thinking  
Promoting free, creative and inductive reasoning  
Examining a patient  
Evaluate clinical cases, order laboratory tests, make differential diagnoses, and negotiate a management plan  
Communicate effectively in a medical environment  
Apply scientific principles, methods and knowledge to medical practice and research  
Search, analysis and synthesis of data and information

## 3 COURSE CONTENT

The clinical practice in psychiatry lasts for three (3) weeks. The students, during the course of those three weeks, participate daily, actively, in the function of the psychiatric services inside the hospital as well as they visit at least one community psychiatric service, according to a predetermined schedule, to be informed and/or engaged in its function. The above-mentioned community services are the: A Short-term Hostel, a Long- term Hostel two Protected Flats, a Mental Health Centre and a Day Centre.

Concerning the in-Hospital services, the students participate in the daily function of the in-patient psychiatric ward, in the weekly interdisciplinary team meetings, in the outpatient clinics, and in addition, do shifts and attend the liaison psychiatry activities. Students undertake a hospitalized patient, who they interact with daily and write down his/her detailed medical psychiatric record, which they turn in at the end of the clinical practice. The writing of the medical history is evaluated and considered by 50% in the final evaluation. The rest 50% of the evaluation is determined with oral examination about general knowledge and skills in clinical examination, diagnosis, differential diagnosis, suggestion of a treatment plan with awareness of the expected indications and side effects of the treatment.

## 4 LEARNING & TEACHING METHODS - EVALUATION

<b>TEACHING METHOD</b> Face to face, Distance learning, etc.	Face to face
<b>USE OF INFORMATION &amp; COMMUNICATIONS TECHNOLOGY (ICT)</b> Use of ICT in Teaching, in Laboratory Education, in Communication with students	Use of ICT in Teaching Use of ICT in Communication with students

**TEACHING ORGANIZATION**

The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study/creation, project, creation, project. Etc.

The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards

Activity	Workload/semester
Clinical Exercise	75
Unsupervised workload (Studying, Bibliographic research & analysis)	10
Written Assignment	5
<b>Total</b>	<b>90</b>

**STUDENT EVALUATION**

Description of the evaluation process

Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay/Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others

Please indicate all relevant information about the course assessment and how students are informed

**Student evaluation languages**

Greek

**Method (Formative or Concluding)**

Formative

Student evaluation methods	Percent
Written Assignment	50
Oral exam	50

**5 Suggested Bibliography**

Textbook of Psychiatry by Basant K. Puri, I. H. Treasaden (2011) 3<sup>rd</sup> ed. Elsevier, Edinburgh.