

COURSE OUTLINE “INTERNAL MEDICINE”

(1) GENERAL

SCHOOL	HEALTH SCIENCES		
ACADEMIC UNIT	MEDICINE		
LEVEL OF STUDIES	<i>Undergraduate</i>		
COURSE CODE	IAYB01	SEMESTER	6 TH YEAR
COURSE TITLE	INTERNAL MEDICINE		
INDEPENDENT TEACHING ACTIVITIES <i>if credits are awarded for separate components of the course, e.g. lectures, laboratory exercises, etc. If the credits are awarded for the whole of the course, give the weekly teaching hours and the total credits</i>		WEEKLY TEACHING HOURS	CREDITS
Lectures and teaching exercises		Lectures (plenary): 1 h daily	15
- 12:00 PM - 1:00 PM: Auditorium Teaching - 9:00 AM - 3:00 PM: Bedside Education - Shift: 1 time every 4 days (Attendance from 17:00-22:00)		Graduate and Post-Graduate Courses: 2 h (weekly) Bedside Teaching: 6 h daily Shifts: Minimum 4 h (this does not include training in the inpatient wards and/or the outpatient clinics)	
Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail at (d).			
COURSE TYPE <i>general background, special background, specialised general knowledge, skills development</i>	Skills' development		
PREREQUISITE COURSES:	(-)		
LANGUAGE OF INSTRUCTION and EXAMINATIONS:	Greek		
IS THE COURSE OFFERED TO ERASMUS STUDENTS			
COURSE WEBSITE (URL)	https://ecourse.uoi.gr/course/view.php?id=1790		

(2) LEARNING OUTCOMES

Learning outcomes <i>The course learning outcomes, specific knowledge, skills and competences of an appropriate level, which the students will acquire with the successful completion of the course are described.</i> Consult Appendix A • Description of the level of learning outcomes for each qualifications cycle, according to the Qualifications Framework of the European Higher Education Area • Descriptors for Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning and Appendix B • Guidelines for writing Learning Outcomes
The purpose of the clinical practice for sixteen-year students in Internal Medicine is to prepare them to acquire the skills necessary to address and manage a variety of urgent and chronic medical issues upon graduation. To achieve this goal, instructors foster and support the development of diagnostic thinking, while students focus on acquiring foundational knowledge in Internal Medicine, which serves as the basis for various medical specialties. Students are required to spend time in the wards, engaging directly with patients to become familiar

with the impact of illness on both patients and their families.

The clinical practice program is designed to encompass a broad spectrum of Internal Medicine and its subspecialties, ensuring a high level of understanding. This is achieved through a combination of in-depth theoretical knowledge and the practical expertise of the instructors in various aspects of Internal Medicine.

Upon completion of their training in Internal Medicine, students should be able to:

- Communicate effectively with patients and their relatives to gather comprehensive and clear information regarding the current illness and the patient's medical history. Conduct a thorough systematic clinical examination while also focusing on specific major issues on a case-by-case basis.
- Interpret and analyze laboratory and imaging tests accurately.
- Document the patient's concerns in conjunction with objective findings from laboratory and imaging tests and formulate a preliminary differential diagnosis.
- Recognize urgent medical conditions and initiate immediate treatment, including the systematic ordering of necessary diagnostic tests and interventions.
- Perform essential clinical procedures to acquire the skills needed for their roles, including injections, placement of intravenous catheters for fluid and electrolyte administration, punctures, biopsies, and blood sampling.
- Describe the clinical presentation, laboratory confirmation, recommended treatment, and prognosis for a wide range of medical conditions.

General Competences

Taking into consideration the general competences that the degree-holder must acquire (as these appear in the Diploma Supplement and appear below), at which of the following does the course aim?

Search for, analysis and synthesis of data and information, with the use of the necessary technology
Adapting to new situations
Decision-making
Working independently
Teamwork
Working in an international environment
Working in an interdisciplinary environment
Production of new research ideas

Project planning and management
Respect for difference and multiculturalism
Respect for the natural environment
Showing social, professional and ethical responsibility and sensitivity to gender issues
Criticism and self-criticism
Production of free, creative and inductive thinking
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Others...
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- Utilize appropriate technologies to search for, analyze, and synthesize data and information effectively.
- Adapt to new situations with flexibility and resilience.
- Make informed decisions based on critical analysis.
- Work independently with confidence and initiative.
- Collaborate effectively within a team environment.
- Engage in interdisciplinary collaboration to enhance outcomes.
- Foster free, creative, and inductive thinking to promote innovation.

(3) SYLLABUS

The course is delivered in conjunction with clinical training, organized into groups of students each trimester.

A. Lectures:

Daily from Monday to Friday, 12:00 PM - 1:00 PM.

These sessions focus on managing emergency medical situations and include discussions of notable incidents through case studies.

B. Patient Ward Visits:

Students visit the wards of the following Internal Medicine divisions at the University Hospital of Ioannina, Greece:

1. 1st Internal Medicine
2. 2nd Internal Medicine
3. Hematology
4. Gastroenterology
5. Endocrinology
6. Nephrology
7. Oncology
8. Rheumatology

During these visits (1:00 PM - 3:00 PM), students learn comprehensive patient care techniques, including detailed medical history taking, thorough physical examinations, evaluation of laboratory and imaging tests, differential diagnosis, and therapeutic approaches. Students are encouraged to actively participate in patient care, including techniques such as serum placement, arterial and venous blood draws, punctures, and biopsies, while engaging in therapeutic decision-making by critically assessing guidelines and individualizing treatment.

C. Teaching in the Divisions:

Under faculty supervision, students engage in discussions about the most instructive cases in the divisions while learning to perform basic clinical procedures.

D. On-Call / Shift Duties:

Mandatory attendance from 5:00 PM - 10:00 PM.

Students participate in the general on-call schedule of the Pathology Clinics (once every four days) and can observe the operations of the Emergency Department of the Internal Medicine divisions under the guidance of attending physicians. They will learn about initial emergency treatments for patients with medical issues and the management of these cases in the relevant divisions. Students are also required to attend ward visits at a time determined by the duty manager.

E. Educational Program:

I. Lectures

Daily, Monday to Friday, 12:00–13:00, in the Auditorium of the University General Hospital of Ioannina.

II. Ward training:

Clinical training will take place daily according to a detailed schedule prepared in collaboration between the program coordinators and the faculty members of the Clinics:

- **In the Internal Medicine Departments and Clinics** (*First and Second*) 11:00–12:00, bedside teaching under the supervision of a faculty member.
- **In the specialized Clinics and Departments** (*Hematology, Gastroenterology, Endocrinology, Nephrology, Oncology, Rheumatology*) 13:00–14:00, in student groups, bedside teaching under the supervision of faculty members.

Students, in consultation with the clinical faculty, also participate in the postgraduate education program of the First and Second Internal Medicine Clinics:

- Literature review (*every Monday, 13:00–14:00*) in the Auditorium of the University Hospital.
- Case discussion (*every Wednesday, 13:00–14:00*) in the Seminar Room of the Clinic, University Hospital.

F. Clinical Skills:

During the internship, students must complete a certification form verifying their attendance and performance of various medical procedures, which is signed by the Division faculty.

G. Clinical Examination:

Students are assessed on their ability to take and present patient histories, conduct objective examinations, and formulate differential diagnoses.

H. Evaluation and Self-Evaluation:

At the end of the exercise, students anonymously complete a questionnaire to evaluate the educational process.

Completion of Clinical Practice:

Students must submit a completed and signed Training Diary, which includes a list of skills acquired, attendance records, and participation in on-call duties (once every four days) and Emergency Department activities, where they will actively participate in the management of emergency cases under faculty supervision.

(4) TEACHING and LEARNING METHODS - EVALUATION

DELIVERY <i>Face-to-face, Distance learning, etc.</i>	In-Person and Bedside Instruction Across the Following Divisions of the Department of Internal Medicine at the University Hospital of Ioannina, Greece: 1. 1st Internal Medicine 2. 2nd Internal Medicine 3. Hematology 4. Gastroenterology 5. Endocrinology
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	6. Nephrology 7. Oncology 8. Rheumatology																						
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY <i>Use of ICT in teaching, laboratory education, communication with students</i>	Learning and Teaching Support via the University of Ioannina's Electronic E-Course Platform, Greece																						
TEACHING METHODS <i>The manner and methods of teaching are described in detail.</i> <i>Lectures, seminars, laboratory practice, fieldwork, study and analysis of bibliography, tutorials, placements, clinical practice, art workshop, interactive teaching, educational visits, project, essay writing, artistic creativity, etc.</i> <i>The student's study hours for each learning activity are given as well as the hours of non-directed study according to the principles of the ECTS</i>	<table> <tr> <th>Activity</th><th>Semester workload</th></tr> <tr> <td>Lectures</td><td>90 per year</td></tr> <tr> <td>Clinical Practice Exercises</td><td>$[(30 \times 6) + (15 \times 4)] \times 3 = 720$ teaching rather than bedside</td></tr> <tr> <td>Teamwork</td><td>100</td></tr> <tr> <td>Examinations</td><td>$24 \times 6 = 144$ per year</td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </table>	Activity	Semester workload	Lectures	90 per year	Clinical Practice Exercises	$[(30 \times 6) + (15 \times 4)] \times 3 = 720$ teaching rather than bedside	Teamwork	100	Examinations	$24 \times 6 = 144$ per year												
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STUDENT PERFORMANCE EVALUATION <i>Description of the evaluation procedure</i> <i>Language of evaluation, methods of evaluation, summative or conclusive, multiple choice questionnaires, short-answer questions, open-ended questions, problem solving, written work, essay/report, oral examination, public presentation, laboratory work, clinical examination of patient, art interpretation, other</i> <i>Specifically-defined evaluation criteria are given, and if and where they are accessible to students.</i>	Final Evaluation Criteria 1. Clinical attendance and participation: daily attendance in the Clinics during the rotation, engagement in and care of patients under faculty supervision, and participation in the discussion of the clinical cases undertaken by the student. 2. Written examination: passing the written exam is a prerequisite for taking the oral exam (<i>weight in the final grade: 0.40</i>). 3. Oral examination: conducted at the end of the rotation and must be passed (<i>weight in the final grade: 0.60</i>). Note: Successful completion of the rotation requires a passing grade in both the written and the oral examination.																						

(5) ATTACHED BIBLIOGRAPHY

- Suggested bibliography: - Related academic journals: 1. "Internal Medicine, The Johns Hopkins" (main text), Book Code in "EVDOXOS" system: 122083647, Edition: 5/2017, Authors: Ashar BH, Miller RG, Sisson SF, ISBN: 9786185296032, Type : Compilation, Provider (Publisher): DIMITRIOS LAGOS SINGLE-PERSON PUBLICATIONS IKE 2. "DAVIDSON, General Principles and Clinical Practice of Medical Pathology" (secondary text), Book Code in EUDOXOS: 133034775, Edition: 24th English, 6th Greek/2024, Authors: Penman ID, Ralston SH, Strachan MWJ, Hobson R., ISBN: 9789605838201, Type: Textbook, Distributor (Publisher): PARISIANOU SOLE PUBLICATION COMPANY INTRODUCTORY COMMERCIAL COMPANY OF SCIENTIFIC BOOKS 3. Lectures by faculty members that are also given in digital format on the e-course 4. Recommended online aids with free access: a. Merck manual: https://www.msdmanuals.com/professional b. Medscape: www.medscape.com
