



DISCIPLINE SHEET

1. Data about the program

1.1.	"CAROL DAVILA" UNIVERSITY OF MEDICINE AND PHARMACY
1.2.	FACULTY OF MEDICINE
1.3.	CLINICAL DEPARTMENT NR. 3
1.4.	DISCIPLINE OF NEPHROLOGY
1.5.	DOMAIN OF STUDY: HEALTH – Sectorally regulated within the European Union
1.6.	STUDY CYCLE: LICENCE
1.7.	STUDY PROGRAMME: MEDICINE – ENGLISH MODULE

2. 2. Data about discipline

2.1.	Name of the discipline in the educational plan: NEPHROLOGY				
2.2.	Discipline code: DS V2M				
2.3.	Discipline type (FD/SD/CD):DS				
2.4.	Discipline regimen (MD/OPD/):DOB				
2.5.	The holder of the course activities				
2.6.	The holder of the seminar activities:				
2.7. Year of study	V	2.8. Semester	IX, X	2.9. Type of evaluation (E/C)	E

3. Total estimated time (hours/semester of didactic activity an self preparation/study

I. Academic training (teaching, practical application, assessment)						
3.1. Nr hours/week	25	From which:	3.2. lecture	10	3.3. seminar/ laboratory	15
3.4. Total hours of educational plan	90	From which:	3.5. lecture	36	3.6. seminar/ laboratory	54
Evaluation (nr. of hours): 10 hours						
II. Self preparation/study						
Time allocation						hours

Study of course materials, textbooks, books, study of the recommended minimal bibliography	10
Additional research in the library, research through the internet	10
Performing specific activities for preparing projects, laboratories, elaborating reviews or other tasks	10
Specific preparation activities for projects, laboratory work, assignments, reports and final evaluation	10
Tutoring	10
Other activities	10
3.7. Total individual study hours	60
3.9. Total hours per semester (3.4.+ 3.7.)	150
3.10. Number of credits	5

4. Preconditions (where applicable)

4.1. of curriculum	Fundamental knowledge of anatomy, physiology and pathophysiology of the kidney and urinary tract; fundamental knowledge of pharmacology
4.2. of competences	Taking the medical history and performing a full clinical evaluation and of the kidney and urinary tract; drafting an observation sheet of the hospital admitted patient

5. Conditions (where applicable)

5.1. to conduct the lecture	PowerPoint presentations, use of multimedia systems, and projector
5.2. to conduct the seminar / laboratory	Equipped with the necessary apparatus for conducting practical activities regarding a hemodialysis or a peritoneal dialysis session.

6. Learning outcomes

Knowledge	Skills	Responsibility and autonomy
The student identifies, describes, explains and evaluates etiopathogenic mechanisms, clinical manifestations, laboratory work-up, diagnostic work-up, treatment principles of specific medical conditions (internal medicine, cardiology, gastroenterology, nephrology, hematology, pneumology, infectious diseases)	The student applies, adapts and integrates the theoretical and practical knowledge necessary for the diagnosis, treatment and monitoring of patients, by utilization of specific clinical and paraclinical methods and techniques.	The student plans, applies and coordinates, under adequate supervision, integrated medical interventions, thereby assuming the responsibility and promoting the interdisciplinary work-up.

7. Course objectives (aligned with the learning outcomes)

7.1. General objective	At the end of the module the student must: - Recognize the renal syndromes and renal disorders
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	<ul style="list-style-type: none"> - Accumulate sufficient basic knowledge regarding the positive diagnosis and treatment of these renal syndrome and renal disorders.
7.2. Specific objective	<p>At the end of the module the student must:</p> <ul style="list-style-type: none"> - Take the patient's medical history and perform the clinical exam in a patient with a renal disorder. - Draft an observation sheet of the hospital admitted patient with a renal disorder - Request adequate laboratory and radiologic investigations and interpret the results - Establish the positive and differential diagnosis in the principal renal syndrome and renal disorders - Establish a treatment plan for the principal renal syndrome and renal disorders - Establish the indications for the renal replacement therapy

8. Contents

8.1. Lecture	Teaching Methods	Observations
Lecture 1: Introductory course, Urinalysis	Lecture, media session, student interactive session (questions/answers)	2 hours
Lecture 2: Laboratory work-up in a patient with kidney disease. Measurement of excretory function	Lecture, media session, student interactive session (questions/answers)	2 hours
Lecture 3: Renal syndromes	Lecture, media session, student interactive session (questions/answers)	2 hours
Lecture 4: Primary glomerular diseases (1)	Lecture, media session, student interactive session (questions/answers)	2 hours
Lecture 5: Primary glomerular diseases (2)	Lecture, media session, student interactive session (questions/answers)	2 hours
Lecture 6: Secondary glomerular diseases (1)	Lecture, media session, student interactive session (questions/answers)	2 hours
Lecture 7: Secondary glomerular diseases (2)	Lecture, media session, student interactive session (questions/answers)	2 hours
Lecture 8: Tubulointerstitial disorders (1)	Lecture, media session, student interactive session (questions/answers)	2 hours
Lecture 9: Tubulointerstitial disorders (2)	Lecture, media session, student interactive session (questions/answers)	2 hours
Lecture 10: Urinary tract infections	Lecture, media session, student interactive session (questions/answers)	2 hours
Lecture 11: Nephrolithiasis	Lecture, media session, student interactive session (questions/answers)	2 hours
Lecture 12: Hypertensive nephropathy. Diabetic nephropathy	Lecture, media session, student interactive session (questions/answers)	2 hours
Lecture 13: Pregnancy associated kidney diseases. Cystic kidney diseases	Lecture, media session, student interactive session (questions/answers)	2 hours
Lecture 14: Acute kidney injury (1)	Lecture, media session, student interactive session (questions/answers)	2 hours
Lecture 15: Acute kidney injury (2)	Lecture, media session, student interactive session (questions/answers)	2 hours
Lecture 16: Chronic kidney disease (1)	Lecture, media session, student interactive session (questions/answers)	2 hours
Lecture 17: Chronic kidney disease (2)	Lecture, media session, student interactive session (questions/answers)	2 hours

Lecture 18: Renal replacement therapy	Lecture, media session, student interactive session (questions/answers)	2 hours
Lecture references: <ul style="list-style-type: none"> • https://www.uptodate.com • National Kidney Foundation's Primer on Kidney Diseases, S.J. Gilbert et al (editors). Ed. a 8-a, Philadelphia, SUA: Saunders Elsevier, 2022 • Brenner & Rector's The Kidney, Skorecki K et al (editors). Ed. a 11-a. Philadelphia, SUA: Saunders Elsevier, 2019 • Comprehensive Clinical Nephrology. Floege J et al (editors). Ed. a 7-a. Philadelphia, SUA: Saunders Elsevier, 2023 • Oxford Handbook of Dialysis, Levy J et al (editors). Ed. a 4-a. Oxford, UK: Oxford Press, 2016 • Handbook of Dialysis, Daugirdas JT et al (editors). Ed. a 6-a. Philadelphia, SUA: Wolters Kluwer Health, 2025 • KDIGO – Clinical Practice Guidelines; http://kdigo.org/home/guidelines/ 		
8.2. Laboratory/ practical lesson	Teaching methods	Observations
CP 1- CP 12: Clinical internship at the patient's bedside	Accumulation of knowledge regarding: <ul style="list-style-type: none"> - Taking medical history, clinical examination of a patient with renal disorder - Laboratory investigations - Diagnostic and treatment work-up of a patient with renal disease (under the guidance of the group's assistant professor) 	36 hours
CP 13: Hemodialysis and peritoneal dialysis session	Presentation and visualization of hemodialysis and peritoneal dialysis sessions under the guidance of the group's assistant professor; practical session on medical mannequins under the guidance of the group's assistant professor	3 hours
CP14: Renal ultrasound	Visualization of normal and pathologic renal ultrasound examinations in different kidney diseases; Renal ultrasound examinations by the group's assistant professor	3 hours
CP 15: Renal radiology – interactive session	Visualization of plain renal X-rays, renal ultrasounds, CT and MRI scans, radioisotope imaging under the guidance of the group's assistant professor	3 hours
CP 16 - CP 17: Interactive clinical case presentations	Media session with interactive clinical case presentations by medical residents and under the guidance of the group's assistant professor	6 hours
CP 18: Critical care nephrology	Accumulation of medical knowledge in terms of characteristics features for diagnosis and treatment of severe kidney diseases in critical care nephrology	3 hours
Practical sessions references <ul style="list-style-type: none"> • https://www.uptodate.com • National Kidney Foundation's Primer on Kidney Diseases, S.J. Gilbert et al (editors). Ed. a 8-a, Philadelphia, SUA: Saunders Elsevier, 2022 • Brenner & Rector's The Kidney, Skorecki K et al (editors). Ed. a 11-a. Philadelphia, SUA: Saunders Elsevier, 2019 		

- Comprehensive Clinical Nephrology. Floege J et al (editors). Ed. a 7-a. Philadelphia, SUA: Saunders Elsevier, 2023
- Oxford Handbook of Dialysis. Levy J et al (editors). Ed. a 4-a. Oxford, UK: Oxford Press, 2016
- Handbook of Dialysis. Daugirdas JT et al (editors). Ed. a 6-a. Philadelphia, SUA: Wolters Kluwer Health, 2025
- KDIGO – Clinical Practice Guidelines; <http://kdigo.org/home/guidelines/>

9. Evaluation

Activity type	9.1. Evaluation criteria	9.2. Evaluation methods	9.3. Percentage of the final grade
9.4. Lecture	Knowledge of the theoretical aspects of nephrology.	Single and multiple choice questions: grades from 1 to 10.	50%
9.5. Seminary/ practical activity	Taking medical history, clinical examination, request for laboratory investigations, establishing the positive and differential diagnosis, establishing a treatment plan	Practical examination undertaken by a two member committee (professor/associate professor/lecturer + group's assistant professor; grades from 1 to 10.	50%
9.5.1. Individual project (if applicable)	-	-	-
9.6. Minimum performance standard			
Minimum 50% at the evaluation of each activity type (the final exam is promoted with a final grad of 5 or higher)			

Date of completion:
06 October 2025

Signature of the course holder

Signature of the laboratory

Date of approval by the
Department Council:

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