

**Name of the module: Nephrology 5<sup>th</sup> year Medicine**

**Number of module 471-8-5027**

BGU Credits: 1.5

ECTS credits

Academic year: 5<sup>th</sup> year medicine

Semester: all year

Hours of instruction: 8:15am –  
4:00pm

Teaching 40 hours

Location of instruction: Nephrology  
Dept. Soroka

Language of instruction: Lectures are  
given in Hebrew.

Cycle:

Position: Obligatory module intended  
for 3<sup>rd</sup> year medical students, as part  
of their preclinical teaching.

Field of Education: Nephrology.

Responsible department: The  
Department of Nephrology, Soroka  
University Medical Center.

General prerequisites: Students are to  
complete successfully the following  
modules: Internal Medicine

Grading scale:

Course Description:

Aims of the module: The nephrology module is conceived to introduce students to the practice of nephrology.

Objectives of the module: At completion of the module, students will develop an approach to acute and chronic kidney and metabolic disturbances, i.e. acute kidney injury, chronic kidney disease, nephrotic and nephritic syndromes, electrolyte and acid-base disorders. Students will be introduced to the three types of renal replacement therapy, e.g. hemodialysis, peritoneal dialysis and kidney transplantation.

Learning outcomes of the module: On successful completion of the course, the student will be able to:

1. Understand pathophysiology of acute kidney injury. The student will be familiar with methods of assessment of the degree of renal dysfunction and pertinent laboratory tests.
2. Understand water disorders as manifest by hypo and hypernatremia.
3. Discern potassium metabolism and management of potassium disturbances.
4. Evaluate renal contribution to the regulation of systemic acid base homeostasis. The student will be provided with basic skills needed to analyze acute and chronic acid-base disorders and their management.
5. Understand the role of the kidney, parathyroid and bone as regulators of calcium and phosphate metabolism.
6. Familiarize with causes and complications of chronic kidney disease, their causes, complications and management.
7. The student will be introduced into principles of dialysis.
8. Apply clinical, laboratory and ancillary immunologic diagnostic testing to develop a differential diagnosis of kidney diseases presenting as nephritic or nephritic syndrome.
9. Appreciate the role and significance of the kidney involvement in systemic diseases.
10. Be introduced to pertinent findings of renal imaging

Attendance regulation: Attendance in 80% of classes is mandatory.

Teaching arrangement and method of instruction: Instruction in the module is based on bed-side teaching and clinical discussions, and to a lesser extent on lectures.

Lecturer: Dr. Boris Rogachev

Contact details:

Cell 0523475965

Email: rogachev@bgu.ac.il

Module evaluation: after the end of the module: the module is evaluated by the students. Student evaluation is processed by teachers and relevant university staff.

Confirmation: 2016 (academic year)

Last update: 11.2015

Assessment:

None

Work and assignments: Students are required to attend lectures and clinical discussion.

Time required for individual work: in addition to attendance in class, individual work of students includes:

1. Review of lectures – roughly 30 minutes per hour of lecture are required.

Module Content\ schedule and outlines: the content and structure of the module, including detailed subjects, and their order.

Required reading: binding reading requirements are offered by the respective teacher. Most but not necessarily all lectures are based on ppt presentations.

Additional literature: Upon request the student is provided with additional reading references. Bibliography of the module includes:

1. Harrison's Principles of Internal Medicine.
2. Brenner's textbook of Nephrology.
3. Clinical Physiology of Acid-Base and Electrolyte Disorders – Burton Rose and Theodore Post
4. <http://www.hdcn.com/> Hypertension, Dialysis & Clinical Nephrology website – recommended for advanced reading

\*All learning material will be available to the students on the module's website (high-learn)/ library/ electronic documents available to BGU students











